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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

DISEASES OF THE EYE AND EAR, IN CONNECTION WITH GENERAL DISEASES, AND THE ASSIST- ANCE THEIR PROPER DIAGNOSIS MAY AFFORD THE GENERAL PRACTITIONER.

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Often inflammations of lids or conjunctiva are the first and only symptom of some constitutional dyscrasiæ. Whether it is a manifestation of this, or purely a local affection, it is of extreme importance to know. Some of these affections, and I can properly say a majority of them, depend upon some local disturbance alone, such as some error of refraction; and if so, all the medicine in the world will not cure it, unless the error be corrected by spectacles. Valuable time may have been lost by too much dependence upon internal medication. There are, of course, many cases of blepharitis marginalis and conjunctivitis where constitutional treatment must be our main dependence.

Of the inflammations of the structure of the eye-ball proper and its contents, no one can deny their intimate connection with

very grave diseases of the general system, and of the great importance of their early and proper diagnosis. If there are any doubts of this, let the doubters only call to mind the revelations made by the ophthalmoscope in diseases of the central nervous system and in renal affections.

It will be better, in considering this part of the subject, to commence at the superficial and anterior part of the globe, and travel backward and inward.

The cornea, according to this, presents itself first. In the child often, but not so frequently in the adult, we have a type of inflammation known as the phlyctenular hepatic, or by some known as scrofulous, where little blisters form on the cornea, and after rupturing leave ulcers. This is frequently the first indication we have of nerve-exhaustion, or the neurasthenia of Beard. This disease may be called, if you will permit me, a barometrical register of the general nerve-tissue. It is true, it is often indicative of or arises from proximate nerve-irritation, from an eczema or nasal catarrh. I have quite frequently seen it caused in the young by over use of such anti-spasmodics as coffee and tea. Entire abstinence from these articles relieves the trouble.

All of us, no doubt, recognize keratitis interstitialis, also known as parenchymatous keratitis, as an almost positive indication of inherited syphilis. It is true, we usually expect to find other landmarks, such as dished face, hatchet chin, and Hutchinson's teeth; yet of the four symptoms the keratitis is the most important. Other forms of inflammation of the cornea often exist, and as often indicate some constitutional disturbance; but their minor importance forbids consideration here.

Of the inflammations of the sclera, but little can be said, as they are very infrequent. When they do exist, they are either traumatic, rheumatic, or syphilitic.

Iritis, or inflammation of the iris, is of frequent occurrence and of extreme importance. How often have you, gentlemen, discharged cases of syphilis as cured, and had them show up in a few weeks, months, or years, with a beautiful case of iritis! I

think most inflammations of this membrane are specific. They have though, often, rheumatism and malaria as the cause. The early diagnosis of iritis is of paramount importance, and of almost as much importance is the discovery of its cause. Occasionally, when we are in doubt about a patient having been inoculated with syphilis, an inflammation of the eye, when diagnosed by a competent person as an iritis, usually satisfies us that it is syphilis.

Just here let me insert a side remark about the diagnosis of iritis. A solution of half a grain of sulphate of atropia to one ounce of water (one drop in eye) will soon decide it. No possible danger can come of the atropia. My advice has always been to the students of the University to use the atropia in all inflammations of the eye when they first come under their observation. No harm can be done, and very probably great good. The pupils and their movements speak volumes. It is to some affections of the spinal cord and brain what the water and steam-gauges are to the contents of the boiler.

It is well known that two nerve-centers are recognized in the action of the pupil. It has a light center and an accommodation center. To illustrate: In sclerosis of the spinal cord, better known as *tabes dorsalis*, the light center is affected. The pupils are small, and if a bright light is thrown on them they neither dilate nor contract. What is known as "the play of the pupil" is absent. Now, if an object is held very close and the eyes fixed on it, the pupils will contract, and we have accommodative reaction. This—what is known as Robertson's pupils—with such symptoms as loss or weakening of sexual appetite and hand-grip, with staggering gait, indicate *tabes*. To the eye-symptom, though, we must more often look for the confirmation of our diagnosis.

To the following conclusions of Reahlmann I refer, to confirm you in the belief of my assertion as to the importance of the pupil and its condition:

1. If the illuminated pupil does not react to light, while the other pupil does, though not illuminated, the first optic nerve still retains its

conducting power, and the failure of the pupil to react is due to a unilateral paralysis of the pupillary branch of the corresponding oculo-motorius, or to some affection of the iris.

2. If the pupil react to light in spite of complete blindness, the cause of the latter is beyond the corpora-quadrigemina.

3. If both pupils react during convergence, both motor-oculi nerves perform their function as regards the pupil.

4. If both pupils fail to react to light, either directly or sympathetically, while they contract during convergence, and if there is a certain amount of vision in both eyes, there is some obstruction to conduction in the fibers between the nucleus of the oculo-motorius and the tubercula quadrigemina.

5. In physically weak nervous persons and in maniacal patients very wide pupils are so often observed that narrow pupils are regarded as an ominous symptom of approaching paralysis. A rhythmical change in the pupils is also observed in these cases, independent of the influx of light or of the act of convergence.

6. Narrow pupils are peculiar to all diseases which cause a diminution of the cortical function, especially paralytic dementia.

7. Myosis is especially frequent in diseases of the spinal cord and medulla oblongata. In tabes the narrow pupil is immovable to light, but reacts to convergence.

8. Irritation to the sympathetic in its peripheral course, or of its cervical ganglia, causes dilatation of the pupils.

9. Dilated pupils are a very characteristic symptom of impeded respiration from the action of carbonic acid upon the medulla. Contraction of the pupils shows that the highest degree of narcosis has been reached.

10. The pupils are dilated in pressure upon the brain, in brain tremors with choked disk, in chronic hydrocephalus, in hemorrhages within the cavity of the skull, and in simple distension of the cerebral vessels.

11. Difference in the size of the normally movable pupils points to an irregular innervation of the sympathetic, due to an irritation, either in its peripheral course or in the central connections in the brain and spinal cord. Mydriasis (wide pupil) of one eye, with movable pupil, is a suspicious symptom, pointing to a threatening brain-disease, while without a movable pupil it has no special significance.

If we should have cataract in a young person, not resulting from trauma, diabetes should be suspected at once. Here we have the crystalline lens as an indicator.

I think it well at this point to consider defects of the shape of the eye and its refractive media, and their effect upon the general condition. As I have stated in a previous article, a persistent severe headache frequently depends upon the above. They produce hyperemia of meninges, with headache, nausea, and vertigo. Of headache I have seen *many, many* cases, that have resisted all other known remedies, yield immediately to the correction of an existing error of refraction by means of spectacles. Sometimes spinal irritation is the result of such an error. Chorea of muscles of face and lids is often produced by the same cause.

It is quite possible to have tubercle deposited in choroid primarily, or to have it here secondarily, and the eye-symptoms attract attention to the disease first.

Syphilitic choroiditis, as syphilitic iritis, may decide us as to whether or not our patient has been inoculated with syphilitic virus.

Sarcomatous tumors do not neglect the choroid. I mention this more to illustrate a disputed point (whether such growths are first local, then general, or local manifestation of a general disease) than for its relation to the subject of this paper. It is a fact that if the globe is enucleated before any external manifestations occur, a cure is almost certain. I saw one eye of a child enucleated for glioma of retina, and in about six months the other for the same. Notwithstanding this was done seven or eight years ago, there has not been the slightest return of the growth. Where there is no return of the growth in that length of time, I feel inclined to pronounce a cure.

Now we come to the optic nerve and retina. Too much can not be said as to the intimate connection between these and the important nerve-centers. The optic nerve and retina may be considered as an extension and expansion of brain substance. It may be considered as a provision of Providence to assist us in fathoming the diseases of that complicated structure known as the brain, which is so situated in its bony casement as to challenge man to penetrate its many secret passages without

producing dissolution. In diseases of the brain auscultation and percussion are of but little service. To take their place, the ophthalmoscope has been given to us by good men now passed away, and well indeed does it do its work. This little instrument is also of great service in spinal diseases. But in these affections important and almost unmistakable symptoms precede the amblyopia.

Becker, of Heidelberg, says as follows:

1. In cerebral disease the eye affection is always on both sides.
2. Optic neuritis or neuro-retinitis alone does not prove the existence of central disease.
3. In primary atrophy (of the optic nerve) we can recognize its tabetic nature by the shape of the visual field.
4. In hemianopsia (blindness of one half of the retina, or the condition we have just been considering) we can also, without atrophy, accurately localize the central lesion.
5. There are visual centers in the cortex of both occipital lobes.
6. We obtain important clues for localization by closely studying the muscle-symptoms.

Dutugue says, in reference to ophthalmic lesions in general paralysis:

In the first stage of general paralysis there is always irregularity of the pupils, pupillary congestion, and varicose dilatation of the retinal arteries and veins.

In the second stage the disorders are more advanced, with the addition of marked pupillary and peripupillary edema. The disk is often obscured or even masked by edematous swelling, whose thickness is directly proportionate to the duration of the disease.

In the last stage, which terminates in death, the pupilla is small, flat, and gray in color, the vessels which normally give it a pink tint having disappeared from the optic atrophy. To this atrophy, atrophy of the choroid, retinal hemorrhages, and granulations of the retina and choroid are also to be added.

In the proper diagnosis of inflammation of the brain or its membranes, or the presence of tumors or clots, and their increase or recession, the close study of the optic nerve and retina are indispensable. With the ophthalmoscope we often

discover first an increase or decrease of the above troubles, and with it we can study such changes as are going on in the cranial cavity, as the disease is mastered by our remedies, or as it carries our patient on to dissolution.

In the last five or six years I have seen six or eight cases of tumor of brain. One was sent here from Arkansas. The only symptom the child had was that it was blind. Intellect clear, and not a defect in either motion or sensation. A tremendous neuro-retinitis existed. Tumor of brain diagnosed. Child died in three days.

Another, in New Albany, lived for eight or ten months. Post-mortem showed two tumors of cerebrum. It is hardly necessary to mention more.

In meningitis, clots, anemia, hyperemia, sclerosis, and many other cerebral affections, the eye complication tells the story.

I have seen and diagnosed ten or twelve cases of kidney disease with the ophthalmoscope, where the family physician had failed to recognize the difficulty. One was in the person of the daughter of an excellent physician. Two were patients of leading New York physicians. The condition of the eye first attracted attention in one. In the other, no one had suspected kidney trouble. It was accidentally discovered by me while examining the eyes of New York school-children to find the influence of study on scholars' eyes. Sight was perfect.

Many diseases of the ear are almost as intimately associated with the patient's general condition as those of the eye.

I have observed several cases of constant coughing relieved by simply removing a plug of wax from the external auditory canal. Most of these had tried all the common cough mixtures, and had been thumped and auscultated for some serious lung complication. One of them had had a change of climate recommended; yet by the simple ear syringe and a little warm water was cured.

Vertigo often results from an inflammation of either the internal, middle, or external ear. I have seen several cases depending upon eczema and furuncles of external auditory canal—one very

severe and obstinate case in the person of the wife of one of our leading citizens. When on the street she staggered like a drunken man. When the eczema was cured the vertigo was relieved.

A patient in the person of a charming young lady, living in one of our Central Kentucky towns (the case has been reported before), had been treated by her home physicians for some months, and afterward by Dr. Jewell, of Chicago, for some time with no relief. The removal of impacted cerumen gave instant and entire relief.

Of suppuration of the middle-ear, all of us know its dangers. Many deaths occur from its neglect. No doubt, many deaths attributed to scarlet fever result from the ear complication common in this affection. Physicians say it irritates the child, and for other reasons it is not proper to examine the patient's ears while suffering from scarlatina. It appears to me that any thing that will conduce to either our patient's comfort or safety is justifiable. I can not understand why the ear should be any more neglected than any other organ at this time.

I believe it to be of the utmost importance to make a thorough examination of the eyes and ears in almost all nervous disorders. As stated in this article, I have often seen headaches, vertigo, cerebro-spinal irritation, hyperemia of meninges, and many other affections having for their sole cause some defect or disease of eyes or ears. Again: Where an eye or ear complication is not the cause, it is often the first and most important symptom of the primary disease; and an early and proper diagnosis of this complication will save many lives and much suffering to humanity.

LOUISVILLE, KY.

ON THE TREATMENT OF HOOPING COUGH.*

BY W. C. WEBB, M. D.

My only design in asking the attention of the Society to the treatment of hooping cough is to relate my experience in the use of croton-chloral in nearly two hundred cases of the disease observed during the last four years.

The lesson taught me by this experience is to the effect that croton-chloral is, with very rare exceptions, singularly well borne by children. Next, that to get the full value of the drug it must be given in decided doses, doses large enough to produce quick and marked effect. A child twelve months old will bear a grain of the medicine every four hours, day and night, or six grains in the twenty-four hours; and, to get its curative effects, not less than this should be given. This during the first week. After that time the cough is usually so much relieved that the number of doses may be lessened, the drug being given say during the day only. Used in this way, that is, pushed to its full effect, I have very seldom seen a case in which the cough was not under entire control within a fortnight. And I include in this statement several excessively severe cases, complicated by convulsions and marked catarrhal difficulty.

Children from ten to twelve years old will require two grains of croton-chloral at a dose, while an adult will not often bear more than four grains repeated, as in the young child, every four hours.

The drug does not disorder the digestive organs, and by lessening the frequency and severity of the paroxysms puts an end to troublesome hemorrhage and vomiting. Occasionally the first few doses produce some irritation about the throat and fauces, but this soon passes off. The toxic effects of the medi-

*An abstract of a paper read before the Kentucky State Medical Society.

cine do not seem to affect the organic centers. I have more than once seen patients fall asleep under its influence while in their chairs, the respiration and movements of the heart remaining unchanged.

Croton-chloral is readily dissolved in comp. tr. cardemons, if first the drug be thoroughly pulverized. An eligible mixture is formed by dissolving one dram in two ounces each of tr. card. and glycerine.

I have met with several cases in which the paroxysms of cough were so severe and accompanied by such extreme gastric irritability that it was necessary to give the patient a few whiffs of chloroform before attempting to administer the croton-chloral. I have seldom found it necessary to repeat the chloroform more than two or three times. In such cases as have used the anesthetic the very happiest effects have followed.

Of the mixture I have mentioned, one dram of croton-chloral and two ounces each of tr. card. and glycerine, the dose is a half teaspoonful every four hours for a child two years old and under.

Croton-chloral is so expensive a medicine that I have, owing to the known efficacy of belladonna in hooping cough, sometimes used the following recipe, and with very good results :

Croton-chloral,	℥j;
Tr. Cardam.,	℥ij;
Tr. Belladon.,	℥ij;
Glycerin.,	℥ij;
M. Dose, same as of other.	

I have sometimes combined the several bromides with the croton-chloral, but I never felt sure that they added in any degree to its efficacy. If one bromide was better than another, it was the bromide of quinia. But I rely now exclusively on the croton-chloral in the management of pertussis. While I have never seen any unpleasant effects from this drug, I scarcely need add that in its exhibition a watchful care should be exercised lest, for some reason, its toxic effects should manifest themselves.

BRYANTSVILLE, KY.

EPILEPSY TREATED BY TREPHINING.

BY W. M. FUQUA, M. D.

Oliyer M., was wounded through the right parietal bone with the sharp edge of an ordinary weeding-hoe in 1873; the external wound was near three inches in length, and at a point near the center of that bone and parallel with the longitudinal sinus. At the time of injury there was copious hemorrhage and some escape of cerebral matter. I saw this patient some ten days after injury for the first time. His pulse was 58, pupils dilated, respiration 16; left side numb, and nearly paralyzed; had nausea and vomiting; the thumb and index finger of left hand were completely devoid of both sensation and motion; was stupid, though answering questions slowly when thoroughly aroused.

I reopened the wound, which had feebly united along its entire tract, and removed some pent up pus and spiculæ of bone, principally of the inner table. I was anxious to make a section with the trephine, but was not permitted to do it. After thorough cleansing it was dressed with simple water dressing, without any closure either by suture or strips, so as to facilitate drainage and give exit to any particle of foreign matter which might have eluded our vigilance. He was actively purged, and blistered at the back of neck, cold water was continuously applied to his head, and bromide of potash liberally given. On the third day following he was somewhat improved, less stupid, free from pain, pupils less dilated, moves leg and arm; but the condition of thumb and index finger is unchanged; the wound had suppurated freely, and pus flowed from within the calvarium. After the lapse of a month the wound closed, the arm and leg improved in mobility, though there was no change in the thumb and index finger; his general condition was much improved. I saw no more of this patient for several months; and, on his visiting me, found he had slight epileptic convulsions, with frontal pain, right

arm slightly contracted, the condition of his fingers remaining as formerly. From that period he grew from bad to worse, and became a confirmed epileptic. He had often been importuned to submit to an operation for relief, but never consented until recently.

On the 21st of June, after laying bare the skull by a crucial incision directly over the tract of original wound, and being assisted by Drs. Anderson and Rascoe, we removed two buttons of bone. The skull was found very much thickened, and the interspace between the openings was removed with the pliers. In this way the entire depressed tract was removed. No anesthetic was given, he bore the operation well, and without interrogation stated that he had better use of his arm and fingers, less numbness, and felt better every way than he had done since the reception of the injury.

July 27th: The patient now presents himself at my office, having had but little inconvenience in any way since the date of operation. The scalp wound had closed except near its center, good motion and sensation had returned to the paralyzed finger and thumb; the numbness and contraction of the arm had disappeared, it felt only a little weak; his locomotion and intellection are as good as ever, and the only regret is that the operation was postponed so long. He has had since the operation very slight convulsions, but consciousness was not lost, and there is of course the hope that the convulsions will soon cease altogether.

There are many subjects of epilepsy confined in our asylums whom it is no doubt possible to relieve. The mere fact of their confinement with the insane causes them to be in a measure overlooked by the medical officers, or to be regarded as incurables; hence, outside of the usual bromidic medication, they get but little treatment for their dreadful malady. Although well cared for and carefully treated when acutely sick, they otherwise are left to shift for themselves.

Dr. Alexander, of the London Work-house, has demonstrated the possibility of relieving many of these cases by ligation of

the vertebral arteries. The operation is not difficult, and the danger involved is small. Between the operation of trephining certain cases and arterial deligation in others, we have two potent measures for relief of such cases as have resisted all other agencies. One of these operations, I need scarcely remark, would apply to such cases as depended upon a centric cause, while the other would be confined to cases depending on an excentric cause.

It seems to me eminently proper that epileptic cases should be removed from the charge of our lunatic asylums and placed in an institution designed especially for them, and there have the benefit to be derived from such treatment as recent observation and experience suggest.

There are, as we all know, many cases of epilepsy wholly beyond hope of benefit from any treatment whatever; in a word, are *incurable*. This class can certainly be better cared for in an institution devoted exclusively to them. If this experiment be tried, and such unfortunates as are capable of performing manual labor, or perchance are skilled in any of the handicrafts, are so used as to be made to contribute to their own care and support, it can not fail, in my opinion, to do much good by materially diminishing human suffering.

HOPKINSVILLE, KY.

Reviews.

Physiological Cruelty, or Fact versus Fancy. An Inquiry into the Vivisection Question. By PHILANTHROPOS. 1 volume, 8vo. Pp. 156. New York: John Wiley & Sons. 1883.

There are few medical questions in which the public have taken so much interest as in vivisection of animals for scientific purposes. Vaccination and alcohol have been discussed by the people at large for a longer time and by greater numbers in and out of the profession, but neither has elicited more heated and acrimonious disputes than the question of "Vivisection." The timely appearance of this volume will enable every one having the desire to do so to acquaint himself with the facts involved, and to form a correct opinion upon the subject.

It is doubtless true that now and then unnecessary pain has been inflicted upon the lower animals by ignorant and heedless persons making vivisection experiments, and the discussion of this question will certainly have the good effect of producing more care on the part of those engaged in this important work. The author of this volume covers the whole subject in a practical, fair, and thorough manner. A prejudiced anti-vivisectionist would derive no comfort or acceptable information from its pages, for the effect of prejudice is chiefly to arm a person against truth. But one simply desirous of obtaining a comprehensive view of the subject will find no better or as good a means of doing so in any other work.

The author has very appropriately assumed the "*nom de plume*" *Philanthropos*, and as one passes from page to page the truly philanthropic purpose of his book becomes more and more manifest. At the same time the reader regrets more and more that the real name of the kindly and philosophic author was not inscribed on the title-page.

In the first chapter the author considers What is Pain, and concludes that "Pain is caused by the excessive stimulation of a nerve; it can only be recognized by consciousness, and is felt keenly in a rough proportion to the mental (which is part of the nervous) development of the individual. The lower animals suffer absolutely much less than man, in varying degrees." As sensation, whether pleasant or unpleasant, is the consciousness of an impression, one might feel somewhat inclined to object to the author's mode of stating his thesis, and also to find fault a little with his sentence "in varying degrees;" but after all the reader is able to get at his meaning, which is the main thing.

He devotes the next chapter to the consideration of "What is Cruelty," which is defined as the infliction of pain without justification or with insufficient justification.

"Our Rights over Animals" is the caption of the next chapter. It is very forcible. Few candid minds will fail to accede to the reasonableness of the ground here assumed. "We have found it impossible to go further and apply to them (animals) the golden rule, the differences in nature, sensibility, and intellect being insuperable by the imagination. But we have seen no reason to suppose that it can be lawful to give pain for purposes of human convenience, pleasure, business, or food, and unlawful to give it for purposes of human health and knowledge." The chapter closes with the conclusion that *to make painful experiments upon living animals lies within an universally recognized right over them, and is not wrong in itself but depends for its morality or immorality upon the circumstances and motives of each particular act.*

The chapters on the relation of experiment to physiology and on the relation of medicine to experiment are exceedingly fine, and will be read with great interest. They abound in useful information, which every educated physician should possess. Eloquent and powerful sentences glow on every page. At the touch of experiment, theory crystallizes into fact. It affords the only solid ground upon which medical science can stand; it alone gives physiology a right to be called a science at all.

Only of what has been tested by experience can we really say *we know*; and every first experience is an experiment.

The author shows that in the principal branches of physiology the most important discoveries have been made by means of experiment; that, with all due limitations, experiment will still be seen to be necessary to certainty and security in medicine, and that in surgery many beneficent operations and much essential pathological knowledge have been evolved by the same means.

The volume concludes with the chapter on Legislation, past, present, and possible, and six appendices on popular fallacies about experiment, amount of suffering inflicted, the fundamental discoveries due to experiment upon living animals, the medical minority and legislation.

A book whose object is noble, written in a manner worthy of the object. The exterior of the volume is attractive, and the paper and typography are all that could be wished.

Treatment of Diseases of Infancy and Childhood, with over Four Hundred Formulæ and Prescriptions, as Exemplified in the Service of Drs. A. Jacobi, J. Lewis Smith, Alonzo Clark, Austin Flint, W. A. Hammond, A. L. Loomis, W. H. Thomson, J. H. Ripley, T. Gaillard Thomas, J. K. Leaming, F. Delafield, L. A. Sayre, C. R. Agnew, L. Duncan Bulkley, Beverley Robinson, R. W. Taylor, G. H. Fox, F. N. Otis, A. A. Smith, E. C. Seguin, F. A. Burrall, E. G. Janeway, F. H. Bosworth, A. H. Smith, C. E. Billington, G. M. Lefferts, etc., in the Hospitals of New York City. By CHARLES H. GOODWIN, M. D. New York: C. H. Goodwin, M. D. 1883. 1 volume, 8vo. Cloth. Pp. 284.

This volume is not a work on diseases of infancy and childhood. It would require much time and space to inform the reader of all that it is not. What it is—"brief told"—chiefly "over four hundred formulæ and prescriptions" of a number of more or less distinguished physicians in New York; a few rambling, fragmentary remarks in connection with each disease mentioned,

setting forth what this physician thinks or what that physician says about its treatment. And this is all. But as the majority of the physicians quoted are teachers and authors whose views have become familiar to the profession through their works, and as their works are easily accessible to all, the book under consideration must be set down as a luxury—to the writer of it, and would be a useless expense to the reader, the cost of it (\$2.50) being out of all proportion both to the bulk and merit.

Hand-book of the Diseases of the Throat, Nose, and Nasopharynx. By CARL SEILER, M.D., Lecturer on Laryngoscopy at the University of Pennsylvania, Chief of the Throat Dispensary at the University Hospital, etc. Second edition, thoroughly revised and greatly enlarged. Philadelphia: Henry C. Lea's Son & Co. 1883. 1 volume, 8vo. Pp. 295.

Nearly one third of the book is given up to the consideration of the anatomy and physiology of the parts whose diseases are treated of in what space remains. But as this information on these parts could be as readily acquired in the text-books on anatomy and physiology, and as those studying the diseases of the nose and larynx are supposed to be sufficiently familiar with the rudimentary branches of medicine, it seems a grand mistake to needlessly increase the bulk by such matter. To be sure a goodly portion of the first ninety-seven pages is occupied by wood-cuts of well-known instruments, the laryngeal mirror, the head reflector, nasal speculum, the sponge holder, and tongue depressor.

Every medical student has already become familiar with these by the time he has bought his first dissecting case. The spray apparatus and the perfume atomizer are certainly no longer novelties, and every barbershop in the land contains "perfume atomizers." Why then augment the cost and bulk of this book with illustrations of these appliances? On turning over the leaves, one is forcibly reminded of the catalogues of surgical

instruments which reach physicians' offices at short intervals. The laryngeal forceps, Fahnestock's tonsillotome, even Thudicum's nasal douche, the common siphon tube, and posterior nasal syringe are reproduced. The author's desire of pictorial display knows no other limits than the title-page and index, for he even afflicts the reader with a full-page illustration of Boneville's dental engine, and another whole page is given up to illustrations of the drills and burrs with which the work of this infernal invention is performed. As dentist's offices are numerous, and every one of them contains one of these engines, and almost every body is obliged to make unwilling acquaintance with both, these needless illustrations might very profitably have been left out. The last instrument figured is a "metacarpal saw" which differs from all former metacarpal saws in cutting "in the pull" and not "on the push," as is usual, hence the necessity of its presence.

But if Dr. Seiler's book is over-illustrated, that is its worst and almost only fault. It is a clear, concise, practical exposition of the subject, such as only one a master of it could have written. One may say without hesitation that it is better suited to the wants of advanced students and young physicians than any other at present in the hands of the profession. The exterior of the book, the paper, and typography are all that one could wish and just what would be expected from the Leas.

What to do First in Accidents and Emergencies. A Manual explaining the Treatment of Surgical and other Injuries in the Absence of the Physician. By CHARLES W. DULLES, M.D., Fellow of the College of Physicians of Philadelphia, etc. Second edition, revised and enlarged, with new illustrations. Philadelphia: P. Blakiston, Son & Co. 1883. 1 volume. Pp. 119.

This little volume is evidently intended for the use of the laity. The physician and surgeon can have no need of it. But unfortunately only a few of the persons who would be benefited

by its plain, clear directions will ever read it. The only way in which it will reach the general public is by the recommendation of physicians to families they attend. The object of the book is good, the rules it lays down are generally simple, direct, and practicable. It is capable of doing much good, and a copy of it should be in every household.

Lectures on the Localization of Cerebral and Spinal Diseases. Delivered at the Faculty of Medicine, at Paris. By J. M. CHARCOT. Translated and edited by Walter Bergh Hadden, M.D. London: The New Sydenham Society. 1883. 1 volume, 8vo. Pp. 341.

No higher testimony to the great value of this work could be desired than that the New Sydenham Society has published a translation of it. The whole subject of what the author calls "regional diagnosis" in diseases of the nervous centers is rather misty. Out of the bewildering maze of contradictory experiments and conflicting opinions the future may develop something practical and useful.

So far, what is really settled has been achieved rather by clinical and anatomical observation than by physiological experiment, and tends rather to a refinement of diagnosis than to any thing serviceable in therapeutics. Science, however, values truth for its own sake, and what appears at first to be merely abstrusely theoretical may, ere long, blossom into something practical and beneficent.

The first nine lectures are almost entirely devoted to anatomical considerations. Throughout the whole volume, the painstaking accuracy and attention to details for which Charcot is celebrated are conspicuous. He assumes that the encephalon is not a single homogeneous organ, but an association or confederation of a number of different organs, each having distinct physiological properties and functions. If the functions of the different parts of the brain be known, it becomes possible to

deduce the seat of the pathological condition. This makes the study of the topography of the brain a matter of importance. Unfortunately here, as every where else in pathology, the want of a uniform nomenclature is a stumbling block to the beginner and a source of confusion.

The second part of the book is devoted to localization of spinal lesions, and necessarily deals largely with anatomical and physiological facts and theories.

It is a most attractive volume, treating this difficult subject in a masterly manner, and as satisfactory as the present state of knowledge will admit.

Clinic of the Month.

INFANTILE PARALYSIS.—C. N. Gwynne, M. B., in a recent address, says in the Medical Press:

Though I can not give you in connection with this subject any original researches of my own, yet for various reasons it is a subject which ought to be an interesting one for discussion. The clinical features of the disease have not, till comparatively lately, been recognized, or rather differentiated; the pathology also has up to a recent period been practically unknown; and the treatment adopted, before the disease became to a certain extent understood, was either *nil*, or in many instances injurious, and even after a fairly accurate, as far as it goes, basis of its pathology had been laid, the modes of treatment suggested showed any thing but a unanimous consensus of opinion. In fact, in this, as in many other forms of disease with which we are brought face to face, we have, I fear, to confess that treatment has very little influence upon the course of events, and that the issue is arrived at almost irrespective of our efforts. On the other hand, infantile paralysis is a disease which is not uncommon in the experience of most general practitioners, and it can not fail to be interesting to find out in the course of the debate what clinical features have predominated in the experiences of individuals present, and what course of treatment has been found by each most favorable. Among the many diseases that entail deformity, and Sheffield, I am sorry to say, has its full complement of such, there are none which present such sad and hopeless characteristics—to the parent whom a sad fate compels to witness it in their children, to the stranger who suddenly in the street comes across the youthful cripple with a withered arm or leg, or to the physician who has to view the same in a hospital, and, in the majority of cases, to confess his skill unavailing. The name of the disease as it is usually known in this country, viz., "infantile paralysis," is unfortunate and misleading, for it is not, as the name would imply, the only form of paralysis that occurs in children; and even if it were it is not confined to the period of infancy, but attacks persons of any age; and it is akin to a form

of paralysis that is by no means uncommon in adults, to which Duchenne has applied the name of "progressive muscular atrophy." How very little has been till lately known of the nature of this disease will be evident from the fact that it was not till 1860 that Von Heine first described its clinical features, and it was not till 1870 that the pathology of the disease began to be understood.

Though infantile paralysis or acute anterior polio-myelitis, a name proposed by Professor Kussmaul, has been observed at almost every period of life, yet we can not but recognize the period of youth as a predisposing factor. Most of us have seen cases of it in children which from time to time come under our care, but few, perhaps not one of us here, have seen an acute case in an adult. The more chronic form of the disease, viz., progressive muscular atrophy, has no doubt been familiarized to most of us, if not in private practice, at least in the wards of a hospital. If we look back and recall the history of cases that have come under our own observation, the first thing that will strike us is the apparent want of any efficient *cause* for the attack. I am sent for to see a child, it is probably teething, but otherwise is healthy as far as outward appearances go; the mother tells me that she put it to bed all right and in perfect health, and in the morning on taking it out of its cradle she finds one leg helpless, or an arm, or both. The child itself does not seem much the worse for the catastrophe, but takes its food much as usual and does not afterward deteriorate in health. The above is all the history which can be got at in a large number of cases, and was in fact the history, and the only history I could get in an old case of a boy named Haslam, under my care last month, where both legs below the knee were paralyzed, the right retaining some slight power of motion. I am aware that it is laid down that the paralysis in typical cases is ushered in with fever and restlessness, but I can only recall one case where I was called in sufficiently early enough to take note of the fever, and in the other cases that have come under my care there may have been the initial fever, but I could not satisfy myself on the point either from the condition of the patient or from the history. On this point of initial fever I would solicit the opinion of those present who have had cases of infantile paralysis under their care. Charcot regards the fever as the usual precursor of the paralysis, and most of the text-books follow his example, but in the few cases I have seen I have failed in the majority of them to obtain any history of high temperature. West, I find (*Diseases of Children*), lays little stress on the initial fever, and makes it rather the exception than the rule.

From statistics gathered from various sources I find that in nearly half the cases the lower limbs are the affected parts; of the remainder the majority represented implications of the arms and legs, or arm and leg, and a very small number the upper extremity alone. There are few features of the disease so interesting in the pathological point of view as the atrophic changes that gradually supervene—the wasting or withering of the limb, which is not confined to the soft structures alone, but also affects the bones. This would suggest that portions of the nervous system are involved that preside over nutrition. Let us compare (side by side with this remark) the deformities that characterize infantile paralysis with the large number of deformities which we witness in rickety children, the latter in many instances presenting more or less partial paralysis, and the notion is apt to occur whether the deformities which characterize rickets may not be due to lesions of a somewhat different character affecting the same portion of the trophic nerve system. But this is by the way.

As regards the cause of the disease, then, I fear we must own that we know nothing whatever of the subject. All the investigators, it is true, assign some cause, such as teething, measles, scarlatina, malarious fever, convulsions, heredity, but when such a variety of wholly distinct causes are assigned which possess no feature in common, I think we are warranted in thinking that they are not causes at all, but merely concomitant or accidental. Heredity, I believe, has a distinct influence in the production of the disease; but, after all, it is only after a very loose or popular mode of expression that we can consider “heredity” in any sense a “cause.” As regards the etiology of the disease, we must, I fear, at present rest content with the very general statement that early life, and especially the period of dentition, is especially liable to disorders of the cerebro-spinal system, and as, from apparently very slight causes, we find convulsions the cause of death in the case of numberless infants apparently robust, so we see an affection of the spinal system with, to all appearance, as little cause producing temporary or permanent paralysis.

I had hoped to show you, under the microscope, some sections of spinal cords taken from patients that have been the subject of infantile paralysis, but I have been disappointed at the last moment in obtaining them. Supposing such a section to be put under the microscope, in the majority of cases you would see an atrophy or shrinking of the anterior gray substance on one side or both, and a paucity, or entire absence, of the large nerve cells, and if any remained they would probably be shrunken and present some pigmentary changes. The

axis cylinders in the same anterior cornu would be few in number and partially wasted, and their place supplied by fibrous-tissue fibrils; the capillaries would probably be numerous and large, though sometimes the reverse. The anterior lateral column would probably be smaller in diameter than on the opposite side, and the nerve fibers going to the anterior nerve roots would be deficient, with some connective-tissue fibers filling their place. In fact, very much the same state of things as is described in cases of progressive muscular atrophy. Why then, I should like to know—and I would be very glad if some gentleman present would suggest—Why, in the latter disease, the affected limbs react normally to electrical stimuli; and in infantile paralysis galvanic reaction is either wholly or partially lost? Gentlemen present will please note this point. We may sum up, then, the appearances of cord sections in infantile paralysis as suggesting a “sclerous atrophy of the anterior cornu of gray matter, with disappearance or shrinkage of the large motor cells, and some hyperplasia of the neuroglia connective tissue, with occasionally secondary emaciation of the adjoining white column.”

Let us now turn our attention to the limbs, and first let us consider the muscles. Of course, we have loss of heat and atrophy. The first inquiry here that will suggest itself to us to make is, What is the cause of the atrophy? Is it due merely to their not being called into action? Or is the atrophy as much a feature of the disease as the paralysis, and dependent upon the changes in the nerve center? The latter seems to be the most probable, as we see the atrophy extends to the osseous system as well, and because we see in some cases it forms one of the earliest phenomena of the disease. This suggests the question of the utility of topical remedies, such as rubbing, massage, electricity, beating, etc. Here again, in the muscle lesion, we observe a marked contrast to the order of sequences that obtain in the cognate disease, “progressive muscular atrophy,” for while in the former the paralysis always precedes the atrophy, in the latter the atrophy precedes the paralysis and determines the amount of it. This point I would also ask the gentlemen present to note, and offer, if possible, some explanation of.

Let us now examine a piece of affected muscle under the microscope, and what do we see? If we take it during the earlier period of its degeneration, we will see simple atrophy of the muscle fibers, some sarcolemma nuclei scattered in clusters between the fibrils, some loss of striation in the muscle fibers, and hyperplasia of the connective tissues; if we examine it after the atrophy has reached its inten-

sity we will find much fatty degeneration, an entire absence in parts of muscle bundles, and a substitution of fatty material.

A curious example of the defective development of the limbs affected by paralysis infantilis presented itself at the Children's Hospital, Brookhill, some time ago, in the case of a girl, Lydia Holmes, aged five years. At the age of about five months, according to her mother's statement, she suddenly lost the use of the left arm and leg, not altogether, but retaining some slight power of movement. After a while she regained to some extent the strength in the affected parts, but they never reached the standard of development of the other limbs. I found on examination that the left arm and leg were both thinner than their fellows, and, on measurement, that the left arm was nearly an inch shorter than the right arm, and the left leg half an inch shorter than the right leg. The hand, too, was smaller in diameter across the palm, and the same applied to the foot. She could walk fairly, limping a little, and showing evidences of weakness in the affected leg, and she could not grasp firmly with the left hand. In other respects she was perfectly healthy. She never had convulsions, nor was there any history of any illness or noticeable symptom prior to the appearance of the loss of power. There did not appear to have been any treatment whatever directed to her case. Having alluded to some of the most interesting features in the clinical history and pathology of the disease, I now arrive at what, after all, is the most practically important to men like most of us who are called in, not so much to gratify our scientific tastes in diagnosing and observing, as to cure our patients. And here my limited experience is not comforting. Advisedly, I think that treatment does do some little good in some cases, especially in those cases where Nature is going to effect some repair of the mischief of her own accord. In such cases, by a variety of measures directed to keeping up an artificial exercise of the muscles of the affected parts, and supplying artificial heat, we may delay the degenerative changes going on in the muscular tissue until such time as the nerve centers, becoming restored to health, supply the natural centrifugal nerve stimulus. To carry out this line of treatment, a variety of expedients have been recommended. Friction, kneading, massage, champooing, and electricity have all been recommended, and are, no doubt, useful, and a gentleman named Klemm has invented a very pretty little apparatus for beating the affected muscles. It is made of wood, and has to be vigorously applied, and when we consider that there is no loss of sensibility in this disease, I have no doubt but that its application is

contemplated by the suffering infant with feelings particularly enjoyable. On the whole, friction with the hand, keeping the limb warm by a casing of cotton-wool, and the application of electricity, sum up the most rational treatment in chronic cases. A toy called the "baby-jumper" is highly recommended by Dr. West.

In using electricity a good deal depends on the method of its application. First, as to the kind of electricity to employ. In bad cases we find faradization of no use at first, for the simple reason that the muscles will not respond to it; on the other hand, in many cases where the former has failed, the application of galvanism will induce fairly strong muscular contraction, so that we may adopt it as our rule in practice to commence with galvanism, and when the muscles are so far improved as to respond to the faradic current, to call in its assistance also.

Early last month I admitted Edith Stocks, aged three years, into the Children's Hospital, suffering from paralysis in both legs practically complete. In her case, too, there was the sudden seizure, but no history whatever of previous fever or indisposition. The muscles of the legs were much wasted, and the feet and legs hung and swung about like flails. I applied the faradic current without the slightest contraction being induced in the muscles. I then employed galvanism, bringing into action first ten, and then twenty cells. The former failed, but the latter induced contractions, the legs being drawn up to the body, and the feet extended. Since that time the galvanic current has been employed at first twice a week, and afterward daily, with, I think, some very slight improvement, but of course it is too early yet to estimate the value of the treatment. The best method of applying the galvanism is to place the anode or positive pole over the spine, at the seat of the disease, and the negative or cathode over the limb, or the nerves that supply the affected parts close to their exit from the canal of the spine. The positive, or the pole applied to the spine, should be stationary, but the negative can be either fixed over the nerves going to the limb, or moved up and down over the affected muscles—the labial method. After some months' or a year or two's perseverance in this treatment, the patient surgeon or parent will probably be rewarded by some signs of improvement. A judicious use of the induced current also will be of benefit. At the same time the general health should attract special regard, and special nerve tonics should be administered. So far for the treatment of chronic cases where there is atrophy of the limb. In the early or acute stage more vigorous medicinal treatment should be employed.

Dr. Althaus recommends the injection of ergotine, one fourth grain for a child a year old, hoping thereby to cause contraction of the blood-vessels of the part, and so deplete its blood-supply. He also stimulates the muscles as they become affected with injections of strychnia. Other natural remedies in the acute stage are cupping, leeches, iodide of potassium, blisters, etc.

THE SPREAD OF CHOLERA.—Dr. George Buchanan, F.R.S., President of the Epidemiological Society, introduced the subject of cholera by some memoranda (*British Medical Journal*):

Cholera reached Europe by way of Egypt for the first time in 1865. Before that date, its course from Asia had been through the Russian Empire. At the first appearance of cholera in Europe, it began in Great Britain fifteen months after its introduction to Europe. At its second appearance, it began in England after about the same interval. Its third appearance does not admit of comparison with the others. At the fourth appearance of cholera in Europe, when it came by way of Egypt, it was epidemic in the Hedjaz in May; it appeared at Alexandria on June 2d; was at Malta, Smyrna, and Constantinople before the end of that month, and appeared in Spain and Italy and at Marseilles during July. Spreading somewhat widely in Europe during the next two months, it was at Southampton on September 17th, and on November 3d it was witnessed at New York. In the spring of 1866 cholera acquired an increased diffusiveness, and by June had attacked many places in the United Kingdom, but hardly any cases occurred in London until July. The Suez Canal was opened in November, 1869. Extension of cholera from Northern Arabia was next threatened in 1871; and the disease prevailed to a small extent in Europe during 1872 and 1873. Since that date it has occurred several times among the pilgrims to the Holy places, but has not established itself in Egypt, nor has it prevailed in Europe.

With regard to the question, When may cholera be expected to travel through Europe to England—how long after its present manifestations in Egypt? Dr. Buchanan said that no medical data exist for an answer. "But we in England," Dr. Buchanan said, "firmly believe that cholera is influenced in its spread by human intercourse. We do not affirm that it passes from person to person as smallpox or typhus does; but we believe that it extends, much after the fashion with which we are familiar in the case of enteric fever, by means of the discharges from the sick, particularly if those discharges be

received into foul cess-pools and drains, or if they obtain admission into drinking-water; and human intercourse is one of the conditions for the spread of cholera in such fashion as this. If we now suppose other conditions for diffusion of cholera to be to-day what they were in 1865, we may inquire how far the conditions of human intercourse have altered in such wise as to affect the probable dissemination and rate of transmission of cholera in and about Europe. It should be remembered that, though Egypt has doubtless incurred repeated risk from her communications with the Hedjaz, there is no evidence that even Egypt has been subjected to danger from cholera, at any time, through her direct maritime communications with more Eastern countries; that the Suez Canal has now been opened for more than thirteen years; and it should further be noted that the present outbreak of cholera in Egypt is not on the line of traffic between Asia and Europe; and it will appear improbable that the use of the new highway will affect the course of cholera toward France and England. Still, it is not to be supposed that 1883 will find us in every respect under the same conditions of human intercourse as 1865; and it is possible that some of the same changed conditions may be such as to affect the opportunities for the migration of cholera.

"Quarantine is not now regarded as capable of fulfilling its pretensions, and its least failure to exclude infection is seen to make the whole system irrational, and its cost and its vexations unjustifiable. Accordingly, England, which long ago abandoned the system as of any avail against cholera, has now the consent of most European nations (as expressed by their delegates to the Vienna Conference of 1874) in preferring for the defense of her ports another system, which, under the name of 'Medical Inspection,' aims at obtaining the seclusion of infected persons, and the disinfection of ships and of articles that may have received infection from the sick. The details of this system, as formulated for practical application in the ports and waters of England, are set forth in an order of the Local Government Board of July 17, 1873. This order is at present operative. From a statement by Earl Granville, I learn that it is proposed to reissue the order, though without change in essentials. It represents the system upon which we rely in preference to quarantine for the protection of our shores. For the last ten years the country has been thus prepared for the invasion of cholera, and the fact of this preparedness should be known.

"We have reason to hope that, if cholera should enter England, it

will find fewer opportunities for doing mischief than at previous invasions. We are generally better provided with defenses against a disease which spreads as cholera can spread. Some further precautions for use at the moment will doubtless be requisite; but it will be on our permanent sanitary works and procedure that we shall with most confidence rely."

MAY THE PHYSICIAN, AFTER TOUCHING INFECTIOUS MATERIAL, AT ONCE UNDERTAKE MIDWIFERY PRACTICE?—Dr. Wiener, of Breslau, states that in the midwifery clinic from autumn 1880 to Easter 1882, during which time Spiegelberg, and, after his death, the author, had charge of it, emboldened by Volkmann's and Ahlfeld's example, students who had to do with infectious materials, such as cadaveric poison, etc., were permitted to undertake deliveries, Spiegelberg and himself proceeding on the principle that if antiseptics actually presented a reliable protection against infection, it must do so in all cases and under all conditions. In the time mentioned there died twelve out of four hundred and seventy-one puerperal women; of these twelve, seven must at once be subtracted, in so far as one was brought into the clinic already intensely infected; another had uterine rupture, with the child escaped into the abdomen; two had stinking carcinoma of the vaginal portion; two had suffered severe injury during delivery, partially owing to instrumental assistance; and one had succumbed to hemorrhage. There remained, accordingly, five fatal cases, equal to 1.06 per cent of the deliveries, which, without the co-operation of other factors, were caused directly by infection. Of these five deliveries it is further to be observed that one woman had been examined outside the clinic by a female not a midwife; two were used for examination purposes; one was examined in the hospital only by the nurse in charge, and not at all by any students. Whether an examination had in this case been made before her entry into hospital could not be ascertained. In the other cases the convalescence was almost always favorable, any high temperatures that were observed being only transitory. These results are by no means inferior to those of most maternity clinics, and do not

permit the inference of an unfavorable result from insufficient antiseptic precautions. They were obtained by strict supervision of the examining students, since before examination they were compelled to take off their coats, roll up their sleeves over the elbow, and wash, with an at least five-per-cent solution of carbolic acid, with soap and nail-brushes. Such strong carbolic lotions should be ready-made in every clinic, since students, in preparing the lotions themselves, almost always use too weak a mixture. For this reason the statement of the Erlangen student referred to, that he had disinfected himself most carefully with *a carbolic lotion*, is not free from objection. It is certainly not quite accidental that the Erlangen case already referred to and two of our five cases were so-called "examination cases." These afford, as Spiegelberg correctly observes, the best example of the risk of too frequent examination—that is, they present an exceedingly large number of complications, since the examining candidates, who are anxiously determined that they should not overlook any peculiarity in the process of parturition, examine unnecessarily frequently, and thereby occasion injuries, while they certainly do not always perform accurate cleansing and disinfection of their hands before each exploration. We should, therefore, not be far wrong in making the assertion that the Erlangen student might have infected the patient even although he had not performed the post-mortem six days previously, for that the cadaver poison should actually have attached itself to his fingers for six days, in spite of careful daily cleansing, is very improbable. If all those who have to deal with a cadaver or a puerperal-fever patient were to exclude themselves from further midwifery practice for a long period, they would need to do the same on every occasion of touching infectious materials, whether a putrid carcinoma or the pus from an opened abscess. That such exclusion would lead to intolerable difficulties is plain. But these difficulties must doubtless be reckoned with if the view is really correct that every one that has to do with decidedly infectious materials can not disinfect himself completely in quite a short period. But this view is not supported

by the experience of the clinic in Breslau or of many surgical institutions. The author believes that it is only necessary that the operator, be he surgeon or obstetrician, possess the necessary familiarity and acquaintance with antiseptic details and is convinced of their value. One must, as Volkmann points out, in any case in which he has to deal with infectious materials, *immediately* undertake a thorough washing with soap and nail-brushes, in a strong—*i. e.*, about five-per-cent—carbolic lotion, and especially must observe careful cleansing of the roots of and parts under the nails, so as to prevent in this way putrid materials from drying in or being imbibed into the deeper layers of the epithelium.

DR. MATTHEWS DUNCAN ON STERILITY.—“It is scarcely,” says this distinguished physician in one of the Gulstonian Lectures, “an exaggeration to say that, in recent practical works on sterility, there is exhibited entire ignorance or entire neglect of the laws of fertility. Every woman from fifteen to forty-five is regarded as likely to breed. If she be sterile, a cure is at once set agoing; and, if a child be not born, the failure is not debited to the nature of the case, but to the want of ingenuity in the doctor. A reputation for curing sterility is spoken of as if it were founded on substantial claims. The prevalent methods of curing sterility are founded on an implied theory that it in most cases arises from impediments in the way of the spermatozoa reaching the ovum. Without sufficient evidence, strictures are assumed to exist, versions and flexions of the womb are held so to distort the interior passage as to prevent progress of the spermatozoa, cervical catarrh is believed to stop them by mechanical obstruction or by chemically poisoning them; and for these real or imagined evils sterile women are made the subject of treatment. It is the theory of mechanical obstruction that, by its simplicity and directness, has possessed the profession and the public; and accordingly many operations and modifications of operations, and very many instruments, have been devised to do away with the obstruction. The theory has had

real rational support in the fact that dysmenorrhea of a spasmodic kind does, as already shown, frequently accompany the sterility, and in the supposition that the same obstruction which causes sterility by impeding the entrance of semen, causes also dysmenorrhea by impeding the exit of menstrual blood, or *vice versa*. It has had still more satisfactory support in the observation that the cure of the dysmenorrhea does occasionally bring with it cure of the sterility.

"The very zeal with which the mechanical theory of sterility has been fostered, and its treatment in many ways pursued, has led to its present decadence, and there is now increased attention paid to other departments of fertility and conception. Especially and justly, the difficulties of naturally starting and healthily continuing pregnancy are brought prominently into view. The mechanical-obstruction theory has begun to shrivel, because of the impression produced by the enormous, though inexactely ascertained, proportion of the failures of the attempts to cure founded on it. Even the ignorant sterile women could see that, if the theory of causation were true, there was an easy and plain theory of cure; and they could also see that the failure of the so-called cure was prejudicial to, if not destructive of, the theory. The importance of the difficulties of pregnancy now brought into prominence will, on account of its great recrudescence, be received with no enthusiasm, such as welcomed the obstruction theory; and the physicians who entertain it can offer no such brilliant prospects of cure to their confiding patients. It is, however, a decided step of progress in a subject of great practicable importance.

"It is in Germany that this department of sterility has been chiefly studied, and Grünewaldt of St. Petersburg is its best exponent. Recognizing the importance of this work, I take the liberty of using it to show the great incompleteness of even the most advanced accounts of the subject. For Grünewaldt sterility is truly never a disease, but a symptom of a disease. Nature has, he says, set no limits to female breeding other than the natural changes in the sexual organs that are observed in

the senile state. Sterility is one of the most frequently occurring disturbances of function caused by disease of female sexual organs. In these views, and his whole work, it is implied that sterility depends on disease of the sexual organs, including chiefly endometritis, mesometritis, perimetritis, and parametritis. The difficulties of conception, he says, have only a slight importance compared with the disorders of the more important vital processes of pregnancy, and these disorders affect chiefly the tissues of the uterus." (British Medical Journal.)

WHETHER, AND IF SO, HOW LONG, SHOULD ONE ABSTAIN FROM MIDWIFERY PRACTICE AFTER MAKING A POST-MORTEM EXAMINATION, OR AFTER A CASE OF PUERPERAL FEVER?—Dr. V. Swiecicki, of Erlangen, in *Centb. f. Gynäk.*, after referring to the divergence of opinions on this point entertained by various authors, such as Winckel, who recommends exclusion for a fortnight, Zweifel, who recommends it for a week, Shröder, for two days, Martin for twenty-four hours, and Küstner, Ahlfeld, Macdonald, and others, who insist upon thorough disinfection of hands, finger-nails, clothing, and body of the physician or nurse to be all that is necessary, time being a matter of subordinate importance provided the disinfection is complete. Volkmann's opinion is also referred to as belonging to the latter class. The author, as a contribution to our knowledge of this subject, records the case of a medical student at Erlangen who examined a midwifery case six days after having opened a thorax, and who had, according to his own account, every day washed with carbolic water in the strictest manner. Before allowing him to examine, the author asked and obtained Prof. Zweifel's permission for so doing. The patient, a iii.-para, had an easy labor, but was subsequently seized with diffuse peritonitis associated with right-sided parametritis, and passed through a well-pro-nounced attack of puerperal fever, being only able to leave her bed at the expiry of four weeks. The child also was infected, gradually lost weight, and died on the twelfth day. The sectio proved the septic nature of the affection. It has, however, to be

noted that, besides the student, the author, a practitioner, and the chief midwife examined the patient. The author says that the practitioner had made no post-mortem examination recently, and that both he and the chief midwife on the same day examined another lying-in woman, as well as other puerperal patients whose convalescence was normal. Relying on this case, the author thinks that abstinence from midwifery practice after making a post-mortem examination, or after a case of puerperal fever, is advisable. He solicits the publication of similar cases, in order to attain to definite principles on the subject. (*Edinburgh Medical Journal*.)

RENAL FORM OF TYPHOID FEVER.—Dr. Didion has chosen this subject for an inaugural dissertation, and comes to the following conclusions: Typhoid fever produces a renal congestion, which plays an important part in the course of the disease. Albuminuria is almost constant, but generally slight and temporary; when abundant, it is a sign of true nephritis. The renal inflammation is both parenchymatous and interstitial, and produces certain characteristic symptoms, such as asthenia, stupor, dryness of tongue, edema of the face and legs, lumbar pains, cutaneous eruptions (pemphigus, ecthyma, boils), and an alteration in the urine, which has a reddish color and the odor of boiled bread; in the deposit red and white blood-corpuscles are found, as well as casts; the urine contains a large quantity of albumen. The diagnosis can easily be arrived at by the above-mentioned symptoms. The termination is often fatal, either from asthenia or uremia. As to the treatment, Bouchard recommends carbolic acid and the salicylates, Polli the sulphites, Klebs the benzoate of potash. Leeches, mustard poultices, and cupping in the lumbar region are useful; but blisters, even with the addition of camphor, must be avoided. In certain cases the disappearance of the symptoms is accompanied by abundant diuresis, which ought, therefore, to be favored if possible; but all diuretics are not equally good; those which possess irritating properties must be avoided. The best in these cases is milk,

pure or mixed with water. Whatever may be the way in which it acts on the kidneys, it is always well borne, and its action is double; it increases the secretion of urine, and hastens the elimination of toxic principles without producing any irritation, even in the most acutely inflamed kidney. Subcutaneous injection of pilocarpine might perhaps be useful; in one case, when the skin was dry and burning hot, Dr. Didion injected twice daily one sixth of a grain of pilocarpine, and under its influence the skin became moist and abundant sweat was produced; the tongue was also less dry than before; the temperature fell in two days from 105.8° to 98.6° F.; but three days later the patient died, after the temperature had once again reached 104° F. New investigations are necessary before we can arrive at definite conclusions. As for the cold baths, Gubler thinks they are contra-indicated in case of nephritis, but Libermann considers their use as surely beneficial in spite of it. Several patients who had been subjected to that treatment did not complain of any inconvenience, and cold lotions, rapidly applied to the trunk and limbs with a sponge, seem to relieve the patient, lower the temperature, and re-establish the functions of the skin. All these advantages must be weighed against the danger of a renal congestion; but further experience alone can show which treatment is most advantageous. (British Medical Journal.)

A PRACTICE OF ESSENTIAL IMPORTANCE FOR THE PROPHYLAXIS OF PUERPERAL FEVER.—Dr. Löhlein (Monthly Retrospect of Obstetrics) asks the question, Is the physician—responsible before himself or to the world for his actions equally be he a practioner or specialist—provided he is acquainted with the rules of antiseptics, in the position so to disinfect himself, after touching a dead body or examining a suspicious lying-in case, that he can dispense with abstinence from midwifery practice without danger to his patients? Expressed still more definitely, As clothes may be changed or instruments rendered completely aseptic, are we in the position to disinfect our hands in a short time, within, say a quarter of an hour or a few hours? As a

contribution to the answer to this inquiry, the author details his own experience of the past four years, during which he examined and treated in consultation numerous patients suffering from putrid abscesses, puerperal fever, etc., and attended meanwhile two hundred and ten midwifery cases in his own practice, without any casualty from puerperal sepsis, and with only very occasional high temperatures. This immunity he traces to the thoroughness with which he disinfected the hands, using soap, nail-brushes, and five-per-cent carbolic lotion. The chief point, he maintains, is not what is used, but how the application is made. He followed the principle of performing thrice the act of disinfection—first, at the patient's house; second, at home, to which he hurried as soon as possible, in order that he might change his clothing and linen; and third, before making another vaginal examination.

Dr. Fritsch gives his experience, stating that since 1872 he has never lost a puerperal patient, and has only had one serious lying-in case (parametritis), although he had conducted many severe deliveries, and had followed other practice almost uninterruptedly. In 1873 he treated a brother suffering from putrid pelvic abscess, and had to dress the wound daily. After every dressing he washed himself with a six-per-cent carbolic solution. During this time he conducted two hundred and forty midwifery operations, and for the first time in the history of the poliklinik of Hallé there was an entire year without a single death. The author argues that this was no mere chance, but the result of the adoption of thorough and intelligent antiseptic precautions.

THE INFLUENCE OF CALOMEL ON DIGESTION.—Dr. Vassilieff has found from experiment that the presence of calomel, at least up to the amount of five grams, in the alimentary canal, does not interfere with the gastric juice, nor affect the triple influence of the pancreatic fluid on albumen, fat, and starch; on mixing the latter fluid with fibrin and calomel, the formation of certain products, indol, etc., always appearing as a result of

prolonged digestion under normal circumstances, is prevented. The gases generated in the process of pancreatic digestion contain none of the usual products of fermentation and decomposition when calomel is present: sulphuretted hydrogen and pure hydrogen are absent, carbonic acid is diminished to from two to ten per cent; while, under natural circumstances, from fourteen to fifty-four per cent is found in the gases evolved by the action of the pancreatic fluid. In fact, calomel prevents all other changes in nutritious substances save those produced entirely by the digestive secretions, decomposition and retrogressive processes in albumens being entirely checked. Calomel also prevents butyric-acid fermentation, as Vassilieff found by experiments on cheese. The action of calomel readily explains the cause of the green color of feces passed by the patients to whom the drug has been administered. Hoppe-Scyler rightly attributed this coloration to the presence of unaltered bile. Now, under normal conditions, bilirubin and biliverdin are changed, by a process of decomposition, into hydrobilirubin, and thus become no longer recognizable in the excretions; but this process is arrested by calomel, and the coloring agents, unaltered, give the feces their peculiar bright green hue.

These researches are described at length by Dr. Vassilieff, in the *Zeitschrift für Physiologische Chemie*, vol. vi, page 112. He has found that this action of calomel is due to its power over the micro-organisms intimately associated with the process of decomposition which takes place in food during digestion. The drug prevents the development of micro-organisms in the digestive fluids, and also destroys any bacteria and micrococci already developed. This fact was proved first by artificial digestion. Vassilief then made a series of experiments to find whether calomel had the same influence in natural digestion. Thirty grains of calomel were administered to a dog in two doses, and the animal was killed a few hours later. Under all precautions the contents of the intestines were then carefully analyzed. Neither indol nor phenol could be found; and it will not be forgotten by those who study contemporaneous

physiological research, that other agents—such as salicylic acid—prevent the formation of indol; and that pancreatic mixtures, formed from natural pancreatic juice, or infusions of pancreatic glandular tissue, undergo septic changes with very great rapidity, in spite of all precautions. None of these changes, nor any formation of indol, occurred in the food taken by dogs to which Vassilieff administered calomel. On the other hand, leucin and tyrosin were found in abundance. Under natural circumstances, these products of pancreatic digestion are so rapidly decomposed, that they can not be detected in semi-digested food. Hence calomel has no influence on the action of the digestive fluids, but entirely prevents those true retrogressive and putrefactive changes whereby the highly unstable products of these fluids are rapidly decomposed and micro-organisms quickly developed in great numbers. When calomel enters the alimentary canal, leucin, tyrosin, bilirubin, and other substances, remain unchanged, and bacteria are checked and killed. (*British Medical Journal*.)

CONTAGION OF PHTHISIS.—At the international Congress of Hygiene of Geneva, Professor Corradi proposed the following conclusions (*London Medical Record*):

1. The belief in the contagion of phthisis dates from the most remote antiquity, and held its ground not only in the opinion of the vulgar, but as a scientific doctrine.

2. In the second half of the last century this belief reached its apogee, probably because the disease assumed a frequency unknown in the past. In most places the State was obliged to intervene and take measures in the interest of the public health, with the hope of impeding the diffusion of the contagion.

3. In the first half of our century, on the contrary, the doctrine of contagion lost ground; anatomy and pathology being in the ascendant, etiology suffered.

4. In the last few years only has experimental pathology again taken up the question, endeavoring to give to the doctrine of contagion the support of experiments on the inoculation of tubercle. Further, it is believed possible to demonstrate that the poison is represented by a bacillus.

5. The problem so clearly put by experiment must be solved by clinical observation. To pathology it belongs to reconcile this doctrine with the fact of predisposition and heredity.

6. But if contagion and transmission be possible, the conditions yet remain to be determined.

7. Meanwhile, hygiene must comport itself in regard to phthisis as it would with a suspected malady, that is, one capable of being communicated or transmitted under certain circumstances.

8. Especially must it consider the conditions of cohabitation. If cohabitation be less constant and intimate, there will be less risk run, and the exhalations of the sick, which, apart from any specific action, undermine the health and predispose to phthisis, will be avoided.

9. Although it is not certain that tuberculosis can be communicated in articles of food, it is nevertheless prudent to avoid the flesh and milk of phthisical animals.

10. It is necessary to exercise great care in the choice of vaccine lymph, whether from the calf or humanized.

11. The institution of special hospitals, or at least of special wards, is strongly to be recommended.

12. The results of new studies and researches, undertaken with the scope of determining the conditions and means of transmission of tuberculosis, will indicate the more special prophylactic measures it will be necessary to take.

13. Whatever opinion is professed as to the nature of phthisis pulmonalis, no one doubts the great advantage the resistance of the organism has in the struggle; and therefore one of the greatest obstacles to the diffusion of this scourge of civilization is to be expected from the practice of hygiene, which assures the moral and physical well-being of the population.

ETIOLOGY OF CONVULSIONS IN CHILDREN. — Prof. Adolph Kjellberg, Sweden. Translated by C. W. Johnson, M. D., Chicago. (*Chicago Medical Journal and Examiner*.)

The so-called functional nervous diseases occur very frequently during childhood, and convulsive diseases are especially abundantly represented. Rythmically, we separate convulsions into two general groups, the clonic and the tonic. Clonic convulsions are those where muscular contraction and relaxation follow each other closely, each action taking up about the same amount of time. Tonic convulsions are those where the contractions follow each other so closely that the

muscles have no time to relax between each contraction, but seem constantly rigid. To the first group belong those convulsions that come on suddenly, usually in many muscles of the body, followed by a more or less complete unconsciousness in the patient. They attack, by preference, children; most frequently occur unexpectedly, with alarming symptoms; are hence of more than usual interest to the physician, and an explanation of their many different causes is of special importance to him. This is at times very difficult, and at times not at all discovered.

Here we frequently miss our guide that otherwise in complicated diseases solves the problem. I mean pathological anatomy. In how many cases of eclampsia and epilepsy that result in death does not anatomical pathology stand nonplussed and unable to explain the manner of the disease in defiance of the most thorough investigation? Not at all strange, because within the pathological science of the nerves many processes take place that can not be followed with knife or microscope. Nevertheless, it is another branch of our science that has of late aided the clinical observer to explain obscure questions within the pathology of the nerves—it is the now persecuted experimental physiology. It is this branch we have to thank largely for our knowledge of nervous diseases, and to this branch we are chiefly indebted for what we know about the subject under consideration.

Brown-Séquard, Sciff, Kussmaul and Tenner have thus shown us that the point where convulsions originate is limited to the pons and medulla oblongata; Nothnagel has even located the "convulsive center" in the pons only. Landois has found that venous hyperemia in the brain lessens the heart-beats, and when the heart has become very slow general convulsions will result, just the same as in anemia of the brain. Hermann and Escher could, by completely stopping the venous blood flowing from the brain, produce general convulsions. Nasse has shown that through an increased amount of carbonic-acid gas, and at the same time lessening the amount of oxygen, convulsions may be produced.

Physiology tells us that an increased temperature enhances the excitability of the nerve elements; likewise certain medicines, as strychnia. Soltmann has shown that the motor centers discovered by Hitzig are probably not to be found in children, but develop later; furthermore, the excito-motor nerves are wanting for the large brain, especially the cortex as the organ for judgment, for the will is, in the new-born child, not yet capable of performing its function; the will has no power over motion; all motor expressions are without knowl-

edge or consciousness, dependent on reflex actions. He has also shown by experiments that the motor nervous irritability in the new-born is very small. He has also shown by direct experiments that the irritability of the vagus, as an inhibitory nerve, is less developed in the child than adult.

This is all of especial interest and very important to know. Those experiments indicate to us where the irritation must take place to induce a convulsive attack. We are instructed that convulsions can be induced by anemia of the brain as well as by hyperemia. We are taught that an excess of carbonic-acid gas in the blood will produce the same result. It explains to us the long-known fact that in children there is a certain disposition to convulsions. This disposition is properly not dependent on any increased irritability in the sensitive or motor system, nor in the reflex center; but it is dependent on the fact that the brain of the child is more or less involuntary, and that it consequently can not as yet through the will affect or subdue the reflex centers. But when experience further tells us that the new-born infant is not as disposed to convulsions as the child of a few months of age, and that this fact consequently is in conflict with what was just said regarding the so-called increased reflex irritability, then comes again experimental physiology to our aid and explains to us that the irritability of the motor nerves in the new-born infant must be very small or insignificant.

What are the causes of convulsions in general, *i. e.*, how do they come about? Now we must admit that they come about by an irritation of the place wherein convulsions originate. Experimental physiology has shown us this place to be the medulla oblongata and the pons, or, according to Nothnagel, the latter only. An irritation here must take place; but to bring about a convulsion, must the irritation be abnormally exalted, or the irritability in the so-called convulsion center increased, or both? These conditions may occur simultaneously. The irritability may be direct, *i. e.*, affect the convulsive center directly, or it may be an indirect or reflex irritability. Therefore, convulsions are divided into direct and indirect, central and peripheral, symptomatic and sympathetic, etc. Another category includes the so-called idiopathic convulsions; they come seemingly without motive, and we are unable to discover any cause. But causes, of course, must exist, although we can not discover them, and the more our science grows the fewer must idiopathic convulsions be, until they are things of the past. I therefore do not take them up here. My point of view being clinical, I will divide convulsions

into symptomatic and sympathetic. The former corresponds to the so-called direct or central, the latter to the so-called indirect or peripheral.

Symptomatic convulsions are those that take place at the beginning of a disease, or during its course, by direct irritation of the convulsive center. This generally happens as a consequence of pathological change within the blood-vessels, hence this form of convulsions is sometimes called hematogenic.

Sympathetic convulsions are those that take place by some irritation of the sensitive nerves; this is conveyed to the convulsive center and a convulsion is produced.

This division of the convulsions is not at all satisfactory, for, taken as a whole, several causes co-operate, as we will see hereafter. Symptomatic convulsions are produced partially by a *disordered circulation*, and partially by a *change in the blood itself*. Disordered circulation is the most common cause, by producing a sudden anemia of the brain. If, for example, the circulation of the blood to the brain is suddenly arrested (*i. e.*, in both carotid and vertebral arteries), the phenomena will be as follows: The pupils at first contract, then dilate; the jaws are closed, the eye-balls rotate upward; breathing is difficult and short, later, slow and deep; then violent general convulsions take place with loss of consciousness. If circulation is now again permitted, the subject will be restored to normal state. Such an experiment has been performed by Kussmaul and Tenner. It shows us the whole group of symptoms, and it also shows us the cause to be anemia of the brain. This anemia must be suddenly produced, however, to produce a convulsion. Kussmaul and Tenner have shown three things as necessary—viz., loss of blood (to brain) must be large, must occur at one time and suddenly, and the subject must be in good condition. An anemia of the brain that has been developed by degrees will not produce convulsions. An anemia of the brain to have the power of producing convulsion may be caused as follows:

1. *A sudden loss of blood*, something we often see happen during childhood.
2. *Sudden and severe loss of juices*, as profuse vomiting and diarrhea.
3. *Arterial contractility*. This certainly plays an important role, by causing anemia of the brain. For example, psychical impressions, especially those extreme in effect, such as fright, wrath, etc. It acts probably by its effect and influence on the vaso-motor nerves,

and causes arterial contractility, anemia, and lastly, convulsions. Sauvages mentions a case where a child, while in great anger (because it did not get the food it liked), went into convulsions. Swieten reports a case where a child became frightened at a dog; afterward the child would go into convulsions by seeing a dog, or even hearing one bark. It is also possible other causes may produce convulsions, such as fright, and this again may produce overaction of the heart with increased flux of blood to the brain.

4. *Compression of the skull* in infants, pressure on an extended fontanelle, pressure on the back of head in cranio-tabes may all produce anemia of the brain (cortex), and thus convulsions occur.

5. *Anatomical changes in the brain*, as extravasation of blood, softening, growths, etc., sometimes cause convulsions; just how, it is not easy at all times to say. It may be caused by direct irritation of the convulsive center, as in hemorrhage or growths, but the probability is that by an increased pressure anemia takes place.

6. During the course of disease, not infrequently there is anemia of the brain, as in hydrocephalus, acute brain diseases, inflammations, fevers, etc.

Just as anemia of the brain may cause convulsions, so may hyperemia of the brain be the cause, if not direct, nevertheless indirect. An explanation will probably be in its place, as it may seem curious that two conditions so different from each other may produce the same phenomena. Let us consider the circulation, especially that of the lymph within the brain. Through late researches by Key and Retzius, so essentially valuable, we have received an accurate knowledge of the lymphatic vessels in the brain and its membranes. We now know that there is an uninterrupted connection between the sub-arachnoidal spaces of the brain and spinal column, the epi-cerebral spaces and ventricles, and also between the peri-vascular spaces within the brain. Key and Retzius have shown us, that the lymph-vessels follow the blood-vessels in the large hemispheres, as well as in the large ganglia (optic thalamus, corpora striata, etc.). The skull forms a closed and firm cavity that will not expand; the contents consist of the brain, blood- and lymph-vessels. When the circulation is normal, the same amount passes continually to the brain.

In the infant where the sutures and fontanelles are yet open, and where the skull may be somewhat expanded as well as reduced, the arterial circulation can be increased somewhat without increased pressure; so may the venous circulation exceed the arterial without

diminishing the pressure within the brain. As the heart's systole and pulse-waves advance must an expansion of the arteries occur, and for the time being an increased amount of blood enters; likewise during expiration the venous blood is hindered, and a slight venous stasis results. When the skull forms a firm space and the brain can not be essentially compressed, then a regulator for the circulation must be found; this regulator is the cerebro-spinal fluid. When the blood current rises, or the venous is hindered, then the cerebro-spinal fluid yields and gives room to the blood. This can only take place within a certain degree; if the arterial current is considerable, then the fluid in the perivascular spaces can not yield sufficiently. What happens then? Counter-pressure; and the consequence is that the capillaries are compressed.

The greater the hyperemia, the greater the counter-pressure; the blood-wave can not be forced to its terminus; consequently, there is a lack of blood in the capillaries—an anemia in the cortex of the brain and large ganglia is the result.

During venous stasis the fluid around the venous and perivascular spaces is driven back, the pressure on and about the perivascular spaces increases, the arterial wave diminishes, the blood is not driven forward; and thus it happens that the arterial blood-supply is diminished; and thus it is clear that there is an anemia of the capillaries of the brain. This gives us an explanation of experiments conducted by Landois, showing that a venous stasis may produce a convulsion. We see, also, that hyperemia and a venous stasis may produce the same result, viz., anemia of the brain and then convulsions as a result.

A flux to the brain occurs in children very often, more so than in adults. The flux is dependent on the number of heart contractions. We all know how easily and suddenly the function of the heart is aroused; an emotion, a fever, and the heart is at once over active, usually the younger the child the greater the action. This fact is in harmony with Soltman's view that the younger the child the less developed is that system of nerves (vagus) whose function is inhibitory. We know how easy a sudden fluxion to the brain may be produced in children, as in many acute diseases, especially fevers, and we have seen that this hyperemia can produce anemia of the cortex of the brain; then we can easily understand why convulsions in similar cases do occur, and also how they are produced. The ease with which hyperemia in the infant is produced would probably more often bring disturbing brain symptoms, were it not compensated for by

the possibility of the skull expanding through the open sutures and fontanelles, which has just been mentioned. *Venous hyperemia* of the brain occurs quite often in children, as in croup and laryngismus stridulus; also in diseases of the lungs, whether hereditary, as atelectesis, or acquired, in hereditary and acquired defects in the heart, etc.

In all these and similar cases venous hyperemia may cause anemia in the cortex of the brain. This may also occur during disturbed digestion, constipation with considerable generation of gas in the intestines; this forces the diaphragm upward, and impedes the circulation of blood to and from the brain. I also wish to mention that a protracted fluxion of the brain produces a venous congestion in it, because the capillary vessels become compressed from the condensed cerebro-spinal fluid and the *vis a tergo* in the veins is diminished, and the blood flows more slowly.

The second group of symptomatic convulsions are those that are caused by a *change in the blood*. This is often combined with disturbances in the circulation, hence this group may have several co-operating causes. Among the changes in the blood that cause or promote convulsions are:

1. *An abnormally increased temperature.* That this plays an important role among the causes of convulsion, especially during childhood, is scarcely questionable. The explanation of this fact is that the excitability in the nerve element increases by an increased temperature. In a sudden case of fever in a child, especially an infant, it is often announced by a convulsion. This corresponds to the chill in the adult. Especially is this the case in the croupous inflammations of the lungs and pleura. It is not only the increased temperature that in a suddenly developed fever produces convulsions, but increased body heat. There is as a rule an increased action of the heart; this produces a fluxion to the brain, and this again, as we have just seen, may result in a convulsion. In the croupous pneumonia it is probably the impeded respiration that produces venous hyperemia, and this in proportion contributes to a convulsion. Just so in pleurisy; but here there is intense pain which no doubt contributes to convulsions, and this may be partially explained by reflex action. The same is the case, for example, in otitis accompanied with convulsions, where certainly the pain is of great importance. We see, consequently, that in similar cases many causes co-operate to produce convulsions. Such is the case with another kind of blood-change, namely:

2. *Infectious Diseases.* Scarlatina, morbilli, variola, cerebro-spinal meningitis, intermittent fever, etc., are not infrequently accompanied with convulsions during the early stages. In those diseases we must assume that it is the qualitative blood-change that reacts on the nervous system. But even if this is the chief cause, *i. e.*, the changed condition of the blood, producing disturbed nutrition in the nervous system, we must still recognize other causes, *viz.*, increased temperature, which appears early, also disturbed circulation within the brain. Consequently we see that many causes may co-operate to produce convulsions during the commencement of fevers. These convulsions, occurring during later stages, are most frequently caused by an anemia of the brain from some cause or another, as just mentioned.

3. Direct intoxication, through mineral and vegetable poisons; to these belong lead poisoning, atropia poisoning, tobacco enema, poisonous sponges, alcohol,* etc. To this class belongs poisoning through the inhalation of gases, such as carbonic-acid gas.

4. Such changes in the blood where a poison is taken up from the system, as in pyemia, septicemia, puerperal infection, etc. In these cases, as in direct poisoning, we must accept that the poison acts as an irritant to the nervous system, perhaps directly on the convulsive center. Here belongs carbonic-acid-gas poisoning, caused by a disturbed respiration, and the blood thus becomes overcharged with carbonic acid; this irritates the nervous system, and a convulsion results. In uremic convulsions, whether they are caused by an increased amount of excrementitious material irritating the nervous system or by an acute brain disease producing an anemia of the cortex of the brain is not yet decided.

Here we may also mention changes in the milk of nurses and mothers; we may, indeed, include intoxications produced by sudden effects through the mind, *viz.*, fear, wrath, etc., which in the child may produce convulsions. In what the change or intoxication of the milk depends is not known, but many cases of convulsions in children originating from such causes are on record. Petit Rordel mentions a case where the mother, shortly after being suddenly angry, put her child to her breast with the consequence of convulsions. Bouchut mentions a similar case. Underwood has reported a case where a man was to make a visit to a family: just as he came inside

* Soltman mentions a case where an infant raised by a wet nurse had frequent attacks for eight days, without finding a cause. Finally a bottle of brandy was found in her bed. She was at once discharged and a new one accepted, and the child had no more convulsions.

the door he fell to the floor and died. The lady became very frightened, soon after put her six months' old child to her breast, and within one hour the child had convulsions, alternating with coma, lasting thirty-six hours, then recovered. Soltman mentions a case somewhat similar.

The *Sympathetic* convulsions are those that are produced by reflex action. They may be produced by any irritation of the sensitive nerves of the skin or mucous membrane. They are very common during childhood, and probably induced by an increased irritability of the sensitive nerves, partially through a diminished or less developed power of the reflex inhibitory center of the brain. Here belong, for instance, convulsions occurring from burns of the skin, large superficial ulcers, extensive intertrigo, etc., pointed foreign bodies that irritate the nerves of the skin, as needles. Siebenhaar mentions a case of a child nine years old, suffering from convulsions, who was ordered a bath, when, on taking off the clothing, a needle was discovered penetrating into the small of the back, deep in the flesh. The needle was removed, and convulsions ceased.

Irritations of the membrane of the ear, whether inflammatory or a foreign body in the auditory canal, may produce convulsions; also foreign bodies in the nasal passages, and, furthermore, an irritation of the kidneys or ureter through renal calculi, not uncommon in children. Demme mentions a case of a boy, one year old, with hereditary constrictions of the urethra, causing great obstruction in urinating, which often produced convulsions. The urethra was dilated, and the convulsions disappeared. The largest proportion of convulsions, however, are produced through an irritation of the mucous membrane of the stomach and intestines. That this cause produces convulsions is one of the oldest-known and acknowledged facts. We see them produced by dyspepsia, colics, intestinal catarrhs, gastroenteritis, constipation, etc. In practice we find many cases where the cause is hard to explain, but after a thorough search we can generally find some ailment in the intestines; most common is chronic catarrh. This treated and improved, the convulsions will disappear. Especially has this been the case in rachitic children in my practice.

One question much disputed, and yet an open one, is, Can convulsions be produced by irritation from worms? Most authors regard it as perfectly natural that such a case exists. At one time it was regarded as the cause in most cases of convulsions; other authors, though few, deny any relation between the presence of worms and convulsions. To judge between them is difficult, for on one side we

see cases happen where children had worms, which through anthelmintics had been destroyed, and no convulsions followed. I have seen a child who discharged one hundred, others fifty, sixty, and seventy worms without ever having had convulsions. On the other hand, cases are reported where we must accept that convulsions are produced by their presence in the intestinal canal and consequent irritation of the sensitive nerves. Cormak mentions a case in a boy, seven and a half years of age, otherwise perfectly healthy, suddenly attacked with convulsions, which were cured after administering calomel and santonin, which discharged many ascarides. I have not seen a similar case. I therefore believe that we can not altogether disregard worms as one of the causes of convulsions, but we must also be careful in a case of convulsions, where worms are inhabiting the canal, to not too suddenly come to a conclusion, but search after other causes, which otherwise may be passed by.

Another question that also takes us back to antiquity, and on which modern thought yet can not agree is, Can convulsions be produced by dentition or not? Among the old authors the majority acknowledge it to be a common cause, but we find many claiming convulsions to be independent of dentition; and thus, we may say, stands the question to-day. Most claim that convulsions may be produced by difficult dentition; others deny it. Dentition is said to be a physiological process, and as such could or should not cause a dangerous complaint. Let it be so. Is there not any other physiological process that is accompanied with danger to an individual? Our very first entrance into this world gives us at once an answer to this question. Dentition is, however, a process that in some children, without doubt, is combined with pain, and this at a period when reflex action is easily produced; and that partially through the last branches of the dental nerves, and partially through the end nerves in the swollen gums, convulsions by reflection may be produced, appears to me not at all impossible. Physiology, indeed, tells us that reflex actions are easier produced from the end nerves than from the trunk; and, when we see cases just before teething, otherwise healthy, with repeated attacks coming on, ceasing as protruded, only possible to begin again while cutting another tooth, and impossible to find any other cause, then I, at least, can not neglect to place dentition and convulsions with each other as cause and effect. I remember a case, now many years since, and then I was convinced that dentition could not cause convulsions. I was called in consultation by one of my colleagues to see a child who had had several attacks. The parents,

especially the father, were very calm, saying that the convulsions now, just as once before, probably depended on dentition. I did not believe it, but made as thorough search as I could for the cause, but in vain. After one or two days, during which time the convulsions continued, a tooth protruded, and the convulsions ceased. Other cases could be cited. What otherwise concerns dentition, we should remember that hereditary disposition plays also an important part. What, then, will not produce convulsions in one child, may very easily in another. It is very difficult, however, to certainly decide a case of convulsions as to cause, as many causes may be found. The one nearest at hand is irritation of the mucous membrane of the intestine, as it is just at this time that dentition takes place, when intestinal catarrhs are so common, and that this alone is capable of producing convulsions we have just shown.

I mentioned disposition and hereditary tendency to convulsions. This topic also deserves to be touched upon in connection with causes to convulsions. Without doubt there is in certain families a disposition to convulsions of a hereditary nature. On what this disposition, this "convulsability," depends, we know not; whether from a disturbed nutrition within the nervous system, or some anomaly in the blood that affects the vaso-motor system; but it is, nevertheless, a fact supported by many reported cases. Duclos reports that a married lady, in her childhood, had suffered from convulsions up to her seventh year. They then ceased, but there remained a deviation in her mouth, and the eyelid of the left eye was prolapsed. She had had nine brothers and sisters, of whom six died in convulsions. She was herself mother of ten children; all have had convulsions; six died; of these, five were under two years of age, and the sixth at three years. Her first-born got convulsions after nursing when the mother shortly before had been angry.

Lastly, in childhood, and, of course, in older patients, cases of convulsions may occur which are simulated. (*Hygiea-Medecinsk och Farmaceutisk Manadskrift.*)

TREATMENT OF ULCER OF THE STOMACH.—F. D. Atkinson, M. D., says in the Practitioner: "I think there can be no doubt that an immense amount of important and accurate knowledge may often be gained from the study of chronic disease, or from the frequent recurrence of the same malady in the same individual, and two or three cases that have come under my notice

during the last few years have impressed this upon me very forcibly. One case of gastric ulcer (diagnosed as such by four or five independent medical men) has been under my care on four separate occasions, and each time she has received almost immediate benefit from the treatment adopted, though she said she had not experienced any relief from what had been previously prescribed. I found she had taken carbonate of iron, carbonate of soda with bismuth, prussic acid and calumba, bismuth, strychnine, and pepsin, effervescing citrate of potash with Schacht's solution of bismuth, and various sedatives, with a diet of beef-tea, mutton-broth, barley-water, milk, and lime-water, but without there being any change in her general condition. The tenderness, the pain, the vomiting continued unchanged, and the last time I was called to see her she said she felt so weak that she was scarcely able to stand. She was exceedingly thin, and with the exception of a flush upon her cheeks, she had not a particle of color either in her face or lips, and her pulse was quick and thready.

"On each occasion I ordered complete rest in bed. A teaspoonful of Brand's liquid essence of beef, or a teaspoonful of Valentin's meat juice in a little cold water, in small quantities every four hours; a wineglassful of milk and lime-water (mixed in equal proportions) to be taken frequently, and the body to be rubbed with olive oil morning and evening. The beef essence and milk were very gradually increased, and when the pain had almost subsided a little sponge cake, bread, barley-water, arrowroot, etc., were allowed, and at last, by very slow degrees, ordinary food replaced the liquid diet. Stimulants of all kinds were interdicted.

"The medical treatment consisted of eight grains of tartrate of iron, fifteen minims of tincture of conium, fifteen minims of tincture of calumba, fifteen minims of glycerine, in one ounce of water, three times daily.

"No aperients were allowed. After a time the mixture was replaced by fifteen minims of Bravais dialyzed iron, three times a day. Since the last attack, about a year ago, the patient has

very materially gained in flesh and color, has been able to take the ordinary diet, except for two or three days, and can walk four or five miles without fatigue.

"P. S. Since writing the above she has had another attack of vomiting, when liquor potassæ had to be given for a day or two first, and koumiss seemed to agree better than the milk and lime-water."

THE DANGERS OF "MASSAGE." — Julius Althaus, M.D., Physician to the Hospital of Epilepsy and Paralysis, says: "It is well known that at various times, epilepsy, idiocy, and some forms of insanity have been treated by massage and gymnastics; but, fortunately, we now hear very little of such therapeutical aberrations.

"It appears to me that diseases of the brain and spinal cord must, on account of the anatomical situation of these organs, be inaccessible to the influence of massage, which can only be applicable to more superficial parts of the body. Apart from this, however, it is important to consider that many of the most important diseases of these organs are of an inflammatory or irritant character, either primarily or secondarily; and this should make it self-evident that massage should not be used for their treatment, even if the suffering parts could be reached by it. I will here only allude to many forms of cerebral paralysis from hemorrhage, embolism, and thrombosis, which are followed by sclerosing myelitis of the pyramidal strands; and most forms of primary lateral, posterior, or insular sclerosis of the spinal cord.

"That which may be good for developing and strengthening healthy muscles, or muscles which have been enfeebled by disuse or certain local morbid conditions, etc., is not for that reason suitable for the treatment of muscular paralysis owing to central disease. In most cases of lateral and insular sclerosis, which are, unfortunately, now much treated with massage and exercise, rest is indicated rather than active exertion; and overstraining of the enfeebled muscles acts prejudicially on the state

of the nervous centers. I have recently seen quite a number of instances in which the central disease had been rendered palpably worse by procedures of this kind; and in a case of cerebral paralysis, which was some time ago under my care, the patient had, after four such sittings, been seized with collapse, which nearly carried him off." (British Medical Journal.)

NOTCHED TEETH.—In a paper read at the Société de Chirurgie of Paris, M. Magitôt lately called attention to the notching and erosions of the teeth in inherited syphilis, and on the relations of this disease to rickets. He thinks that the notch is not characteristic, and states that it is never found in some races frequently affected by syphilis, such as the Japanese and Peruvians. According to Magitôt, not only inherited syphilis, but also all other serious troubles of nutrition, may cause diminution in the number and size of the teeth, or delay in the period of their eruption, but never erosion. Most frequently the latter is caused by certain nervous affections of early childhood, such as infantile convulsions, especially when accompanied by general debility. (British Medical Journal.)

TREATMENT OF OLD CASES OF COMPOUND DISLOCATION OF THE ULNA IN CONNECTION WITH COLLES' FRACTURE.—At the late meeting of the American Medical Association, Dr. E. M. Moore read a paper on the above subject. He said: "In cases of Colles' fracture there is also dislocation of the styloid extremity of the ulna, which dislocation in many cases is not reduced, and great deformity is the result. At any time before before six months he re-breaks the united fracture and attempts a reduction of the dislocation; but when the cases are of so long standing as not to permit of breaking the bone he excises the extremity of the ulna, thus making a useful and movable joint."

Notes and Queries.

THE AMERICAN PRACTITIONER.—The editorial connection of Professor Parvin with this journal ceased with its July issue. We know that this announcement will cause every reader of the AMERICAN PRACTITIONER to feel that he has sustained a personal loss. The step was made necessary, however, by the contemplated removal of Professor Parvin, in the early autumn, to Philadelphia, where, as is known, he goes to occupy the Chair of Obstetrics in the Jefferson Medical School, recently made vacant by the resignation of Professor Wallace.

The writer, in addition to the mere personal aspect of a loss, which is indeed great, will experience a sense of regret in this separation from his active, ready, amiable, scholarly, and judicious editorial associate, such as he finds his pen all unequal to describe. The only solace which remains to him in this the first direct calamity which has ever befallen the AMERICAN PRACTITIONER is the assurance that, though Professor Parvin's name will no longer appear on its cover, its pages will continue to be enriched by his contributions.

Dr. John A. Ochterlony, who succeeds to the official position so long adorned by Professor Parvin, needs no formal introduction at our hands. He is already favorably known to readers of the periodical medical literature of America, and is confessedly among the best contributors to that literature. Of this our readers may rest assured—his *single* aim will be to increase the interest and usefulness, and thereby extend and quicken the influence of this journal. We bespeak for him, therefore, the kindly greetings of that large and select circle of friends embraced in the term, "our subscribers," who, it is an unalloyed satisfaction to say, have now for the past fourteen years,

both by pen and purse, so liberally sustained the AMERICAN PRACTITIONER.

THE ENGLISH ON THE ETHICAL QUESTION.—It is not uninteresting to notice that a leading physician of the United States—the President elect, by the way, of the American Medical Association, Dr. Austin Flint—has just published a little volume entitled “Medical Ethics and Etiquette.” It is well when such subjects are undertaken by men of acknowledged authority and long experience. It is the happy distinction of our own medical literature to contain a classical work on this subject by a physician whose fitness was acknowledged by no less a judge than Dr. W. Heberden. “What you have already communicated to the public,” said Heberden, in his eighty-fifth year, writing to Percival, “with so much just applause, shows you to be peculiarly well qualified for drawing up a code of medical ethics, by the just sense you have of your duties as a man, and by the masterly knowledge of your profession as a physician.” We may with justice apply the compliment to Dr. Flint.

It is well for the United States that one in the position of Dr. Flint, whose accomplishments, age, and success protect him from all charges alike of presumption or jealousy, has taken up the modest part of a commentator on Percival, or rather on the code of the American Medical Association, which is based on Percival’s Code, the very words being carefully preserved whenever they conveyed the precepts it is wished to inculcate. We would impress upon all our younger readers to make the principles of medical conduct a part of their care and of their study. We would even go further, and, in the words of Dr. Flint, suggest that the knowledge of the ethical code should be made a part of medical education. In early professional life, and in the pressure of professional competition, there is sometimes a temptation to forget that we are bound, as members of a liberal profession, to abstain from all vulgar methods of success, and especially from that meanest of all methods—taking advantage of a professional brother in any moment of his temporary absence or of

his temporary blame or unpopularity among those who are not in a position to judge him. To see cards, advertisements, and puffs—direct and oblique—which reach us every week, in which medicine, midwifery, and surgery are offered on terms more like those of a dealer in rags, is a sight that would make Hippocrates or Percival weep. Nothing can justify such things in men who seek to strive lawfully. Young medical men may properly feel anxious to succeed. It is affectation to talk as if they had not to live by their profession and to justify their choice of it by showing that they can live. But it is a fatal mistake to make ethical errors at the beginning and think to become more scrupulous with the advance of time and with the advent of success. A little clap-trap, boasting, playing with a false title till a legitimate one can be secured, the entertainment of any gossip or scandal reflecting on a professional neighbor, or unprofessional methods of gaining credit or notoriety, may appear little vices in the early days of professional life. But he errs who thinks so. Such errors corrupt good manners; they are adhesive; they stick to a man awkwardly, even when he would give hundreds to repudiate them. They should be resisted absolutely and in embryo. There are other ways by which young men rise out of the keenest competition into success and honor, such as devotion to their work, to the study of their profession and of its great models, and consideration for their patients on the one hand and for their professional brethren on the other. These are the eternal principles by which professional happiness, honor, and success are to be secured; and he is the wisest man and the worthiest member of his profession who gets them well into his mind and allows them to dominate all his conduct.

It is well known that a somewhat sharp difference of opinion has arisen among our transatlantic brethren lately on the question of professional intercourse with homeopaths. Though the principles of medical ethics are good for all time, new questions of application arise. Homeopathy is an instance. It is a thing of yesterday. It is not so much as mentioned by Percival, and

the profession has had to deal with it as a novelty. Hitherto the profession has been practically unanimous in refusing consultation with homeopaths, either because their practice was based on an exclusive dogma which is contrary to the professional ethics, or on the ground, as Dr. Flint puts it, "of assuming a distinctive appellation," implying an essentially distinct system of practice, and an attitude of antagonism to the regular profession. Dr. Flint does not so much object to a man holding a dogma, even an exclusive one, even one so absurd as homeopathy, as to his assuming "a distinctive appellation." This is very much the same ground as that taken by our own College of Physicians, which called upon its members to uphold the dignity and freedom of the profession by discountenancing those who trade upon designations implying special modes of treatment. Our own view is that of two men practicing homeopathy, the one calling himself a homeopath and the other not, the former is the honester man of the two. But it is not "for the good of the patient," which is the great end of medical ethics, that we should meet either of them. Such a consultation is misleading to the patient, and likely to be compromising to both parties.

The New York Medical Society has altered, as is well known, the National Code of Medical Ethics, which declares that "no one can be considered a regular practitioner or a fit associate in consultation whose practice is based on an exclusive dogma, to the rejection of the accumulated experience of the profession, etc. It proposes to authorize consultation with any registered or qualified practitioner, whatever the absurdity or exclusiveness of his dogma, and whatever may be the trade-label that he adopts. It is beyond the power of the New York Medical Society to impose such consultations on men who respect themselves or their patients, or the accumulated experience of the profession; and we shall be much mistaken, if, under the presidency of Dr. Flint, the American Medical Association does not uphold its own moderate and dignified definition of a regular practitioner, as quoted above. Free institutions are admirable,

but they must include freedom for those who decline to be warped by a dogma, or compromised by one who believes, however honestly, in an absurdity. (The Medical Gazette.)

FROM the many kindly notices of the transfer of Professor Parvin from the University of Louisville to Philadelphia, we make room for the following from the Phila. Medical Times: "The election of Prof. Theophilus Parvin to the chair of Obstetrics and Diseases of Women in Jefferson Medical College was one reflecting great credit on the wisdom of the Board of Trustees, as it is generally regarded as the best selection that could be made for the school. Dr. Parvin, in leaving the Louisville University, in which he occupied a similar position, to come to Philadelphia, leaves behind him an excellent record, and brings with him the good wishes of a large number of friends. As a teacher, practitioner, and medical journalist, he is widely known to the profession; and we welcome him to a larger field of labor in full confidence in his ability to fill it with distinction. He was born in 1829 in Buenos Ayres. During his early years he lived near this city, where he received in 1852 the degree of M.D. from the University of Pennsylvania. He was President of the American Medical Association in 1879, and his address at Atlanta will be long remembered by those who heard it. He has also held professorships in the Medical College of Ohio and in the College of Physicians and Surgeons of Indiana. He is writing a systematic work on Midwifery, which will probably be issued this fall. He is a scholarly writer, an impressive speaker, an original and experienced practitioner, and, withal, a man of sterling character and positive convictions.

AMONG the notices of some bequests to charitable and religious institutions by a deceased lady, who resided in Edinburgh, is one of £500 to the Edinburgh Antivivisection Society. Considering the platform of such a society, there is some difficulty in describing a donation to it as going either to a charitable or religious institution.

NOTE ON HYDROBROMIC ACID AS A SUBSTITUTE FOR THE BROMIDES.—This was the title of a paper read by Dr. C. L. Dana, of New York. The dose of the pure acid should be from ten to twenty drops; of the officinal, or the ten-per-cent solution, one dram to two drams and a half. It was usually given in two small doses. During the past two years he had employed hydrobromic acid in the following conditions: Epilepsy, alcoholism, various forms of headache, vertigo, general nervous depression, neurasthenia, chorea, insomnia, hysteria, post-hemiplegic disturbances, etc. He had seen the greatest benefit from the drug in epilepsy, in post-hemiplegic difficulties, and in other lighter general nervous troubles. It did not prevent cinchonism, certainly not in the small doses in which it was usually prescribed. Hydrobromic acid was recommended in preference to the haloids, because it was agreeable to take, non-irritating, and did not produce an eruption or bromism. (New York Medical Journal.)

THE SECRET OF LONGEVITY IN A PHYSICIAN.—Why physicians live to old age is thus told in "English as she is spoke," or the "New Guide to Conversation in Portugese and English:" "A physician eighty years of age had enjoied of a health unalterable. Theirs friends did him of its compliments every days: Mister doctor, they said to him, you are admirable man. What you make then for to bear you as well?—I shall tell you it, gentlemen, he was answered them, and I exhort you in same time at to follow my example. I live of the product of my ordering without take any remedy who I command to my sick."

A VALUABLE LIBRARY. — Of the library of the Surgeon-General's office in Washington, Dr. Billings says that it not only contains more medical literature than the British Museum or the National Library of France, but it covers a wider field, represents better the medical literature of the whole world, and is decidedly a better practical reference and working collection for medical purposes than either of the great libraries referred to.

MEDICAL OFFICERS OF THE BRITISH ARMY.—Lord Wolseley, before an investigating committee, has made charges against the medical officers who served under him during the Egyptian campaign, but, as on former occasions when complaints against the British army surgeons were made by unjust and hostile officers, the charges, although investigated by Royal Commission and Parliamentary Committees, were found to be utterly groundless.

It is difficult to understand his Lordship's exact position; for recently, at the distribution of prizes to the students at the Medical School of Charing Cross Hospital, he acknowledged in the strongest language the great obligations he had been under in all his campaigns to the medical officers, and the excellent manner in which they had performed their duties, especially in the recent war in Egypt. He concluded by saying that though he might have found fault with the medical department, he had never had cause to find fault with the medical officers during his long career, and had, on the contrary, always found them zealously anxious to carry out the duties they had to perform. It is a pity his Lordship did not thus express himself before the committee, for there can be no doubt that the last recorded opinion is in accordance with truth, and does simple justice to the excellent medical officers of the British army.

M. PASTEUR having offered to organize a mission for investigating the cholera in Egypt, the Hygiene Commission has indorsed the scheme. The mission will consist of M. Roux and M. Thuillier, of M. Pasteur's laboratory, M. Strauss, of the Faculty of Medicine, and M. Nolaco. M. Pasteur has written to Lord Granville to solicit the grant of facilities to the mission in Egypt. (*British Medical Journal*.)

THE Baly medal for physiological research has this year been awarded by the College of Physicians to Dr. Brown-Séquard. The last recipient of this medal was no less a person than Charles Darwin.

RECENT Swedish medical journals record the death of the distinguished Professor Malmstén. He was Knight Commander of the Grand Cross of the Royal Order of Vasa, Commander of the Order of St. Olaf, Knight of the Imperial Order of St. Stanislaus, 1st class, and a member of numerous learned societies. For many years he was a zealous and most able teacher in the Carolinian Institute of Stockholm. On resigning his professorship in 1876, he gave a substantial evidence of his attachment to the institution in which he had won world-wide fame and for whose success he had labored with so much ability and zeal, by donating the sum of five thousand crowns, the annual interest of which is to be awarded by the Faculty as a stipend to the licentiate in medicine who shall have passed the most meritorious examination. The stipendium bears the name of the generous donor.

Although a prolific contributor to the medical press and the author of many valuable articles in Scandinavian journals, it is especially as the discoverer of trichophyton tonsurans that he is best known among scientific physicians all over the world.

MR. BENJAMIN BELL, F. R. C. S., ED. — "He was, in the best and largest sense of the word, an accomplished physician, combining the practical and theoretical teachings of the older men with the minute and microscopic research of the more recent, harmonizing them as far as they admitted of harmony; receiving, though not, of course, always accepting, whatever had the promise of progress in science, and applying what he accepted to practical use in the treatment of disease. Above all, he was safe. His patients could and did rely on him as implicitly as his friends did in other relations in life. And he was what all truly good and great men are, single-eyed and simple. *'Multis ille bonis flebilis occidit.'*"

DISINFECTION OF MAILS FROM THE EAST.—The Sanitary Committee of the Privy Council has directed that the mail-bags from the East shall be soaked in tar. (British Medical Journal.)

THE following is, as nearly as type can reproduce it, a facsimile of a postal-card recently received by the Illinois State Board of Health (Chicago Medical Journal):

Fieldon Ill 5-12-83.

John H Rauch M D. Sir. you still persist in trying to frighten our Graduates, like Springer of Hardin. who have attended two full, long terms in our School & Honorably graduated. I look upon you, as the chief, of a set of Dastard Bigots & villians & the sooner you arrest Springer the sooner you will get through with it. Yours. L C. Washburn. President of the St. Louis Eclectic Medical College.

The "Dastard Bigots & villians" who compose the Illinois State Board of Health decline to recognize the St. Louis Eclectic, and "frighten" its alleged graduates by refusing to issue them certificates entitling to practice. *Hinc illæ.*

THE election of Professor Huxley as president of the Royal Society, in place of the late Mr. Spottiswoode, has met with warm approbation on all sides. The distinguished biologist on whom this honor is conferred, is not less popular than he is eminent, and under his direction there is every reason to hope that the services rendered to biological science by the society will be yet further enhanced. (British Medical Journal.)

DR. HENRY J. BIGELOW.—At a meeting of the Royal Medical and Chirurgical Society of London, held on June 12th, Dr. Henry J. Bigelow, of Boston, was elected a Foreign Honorary Fellow, as were also. Prof. Charcot, of Paris, Prof. DuBois Reymond, of Berlin, and M. L. Pasteur, of Paris.

AN aphorism of Voltaire: "Only the charlatan is always certain."

A NEW MODE OF BURIAL.—At the recent general assembly of cement manufacturers at Berlin, says the *Lancet*, Dr. Frühling described a new application of cement. He explained that it would be easy to transform corpses into stone mummies by the use of Portland cement, that substance, when hardened, not in any way indicating the organic changes going on within it. He further illustrated the subject by describing various industrial uses of lime as a preventive of decomposition. The cement in hardening takes an accurate cast of the features which it incloses, thus allowing of their exact reproduction after the lapse of centuries. It is suggested to use coffins of rectangular shape, it being further considered by Dr. Frühling that underground sepulture is needless, as the coffins soon become practically masses of stone, and can therefore be built into pyramids.

A GERMAN-AMERICAN MEDICAL MONTHLY.—The *Medicinisches Chirurgisches Correspondenz-Blatt* is the title of a new monthly intended for German-American physicians. There are over two thousand of these in the country, and it is thought that they need an organ. The journal is published in Buffalo, N. Y., and edited Dr. M. Hartwig, of Buffalo, in conjunction with Dr. Meisburger, of the same city, Dr. Jacobson, of Syracuse, Dr. Proegler, of Fort Wayne, Ind., Dr. Schwartz, of Vienna, and Dr. Reuter, of Berlin. In an editorial note, commenting on the Code controversy, the editor says: "The physicians in Germany have never felt the need of a code, and have never had one. The general rules for guiding the conduct of gentlemen have been found sufficient."

THE Boylston Prize Committee, appointed by the President and Fellows of the Harvard University (U.S.A.), have awarded this prize (two hundred dollars) to Dr. Braidwood, of Birkenhead, for his essay on "Measles, German Measles, and their Counterfeits." No doubt the award was just, and it has certainly fallen to an excellent physician and accomplished gentleman.

THE RESIGNATION OF DR. DALTON.—Dr. John C. Dalton, the well-known physiologist, has resigned his position as Professor of Physiology at the College of Physicians and Surgeons, which he held for so many years. He will be succeeded by Dr. John G. Curtis, who for several years past has been the adjunct professor. Dr. Dalton's resignation is very generally regretted.—(Medical News.)

A PITTSBURGH lady doctor says that women can understand woman, and it often does a patient more good to talk to her of spring bonnets and wraps than is effected by medicine. Husbands and fathers want to look out for that lady physician. Instead of recommending fifty cents' worth of aqua pura for a sick headache, she may prescribe a \$14 bonnet and a \$25 Surah overskirt, or something that way. (Norristown Herald.)

ARE French flats healthy? Yes, very. Are people in them healthy? No. Why? They have to starve and go half naked to pay the rent. Why are these flats called French flats? To distinguish them from American flats. What are American flats? The people who live in French flats. (Life.)

HOLMES calls the vivacious Ricord "the Voltaire of pelvic literature—a skeptic as to the morality of the race in general, who would have submitted Diana to treatment with his specifics, and ordered a course of blue pills for the vestal virgins." (The Medical Age.)

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